SCOTT RIT-PAK III

PORTABLE AIR SUPPLY

FOR USE WITH A SCOTT AIR CYLINDER
TO SUPPLY BREATHING AIR TO COMPATIBLE SCOTT PRODUCTS

This instruction sheet describes the operation and maintenance for the SCOTT RIT-PAK III portable air supply. Read and understand this entire instruction sheet before attempting the use of the SCOTT RIT-PAK III portable air supply.

WARNING

THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY MAY BE USED TO SUPPORT HUMAN LIFE IN A HAZARDOUS ATMOSPHERE. IMPROPER USE OF THIS BREATHING AIR SUPPLY MAY RESULT IN PERSONAL INJURY OR DEATH.

IMPROPER USE INCLUDES, BUT IS NOT LIMITED TO, USE WITHOUT ADEQUATE TRAINING, DISREGARD OF THE WARNINGS AND INSTRUCTIONS CONTAINED HEREIN, AND FAILURE TO INSPECT AND MAINTAIN THE AIR SUPPLY OR RESPIRATOR SUPPLIED BY IT.

THIS AIR SUPPLY IS INTENDED TO BE USED ONLY IN CONJUNCTION WITH AN ORGANIZED RESPIRATORY PROTECTION PROGRAM WHICH COMPLIES WITH THE REQUIREMENTS OF A NATIONALLY RECOGNIZED STANDARD SUCH AS OSHA SAFETY AND HEALTH STANDARD 29 CFR 1910 PARAGRAPH 134 AVAILABLE FROM THE US DEPT. OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

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SCOTT RIT-PAK III *PORTABLE AIR SUPPLY*
TO SUPPLY BREATHING AIR TO COMPATIBLE SCOTT PRODUCTS

DESCRIPTION

The SCOTT RIT-PAK III portable air supply is intended for use by a Rapid Intervention Team (RIT) as an **emergency** source of breathing air to supply air to a single respirator being used by one person only while that person is being evacuated from an atmosphere requiring respiratory protection.

The SCOTT RIT-PAK III portable air supply and its accessories or options are **NOT** NIOSH or NFPA approved. The RIT-PAK III portable air supply is intended for only use in conjunction with a respirator as an emergency air supply source to that respirator to aid in the evacuation of the respirator user from a hazardous environment. The addition of the optional Emergency facepiece and Emergency breathing regulator provide greater options for use of the equipment, but the RIT-PAK III portable air supply is not a complete respirator.

This equipment must never be used to supply more than one respirator user at a time. The RIT-PAK III portable air supply is **NOT** an air cart nor is it intended for use as a source of breathing air for routine operations or as a hose line air supply system. Do not use any additional hoses, adapters, or connectors except as directed by this instruction.

The SCOTT RIT-PAK III portable air supply consists of a combination LOW pressure / HIGH pressure supply assembly with a single cylinder coupling to attach to a breathing air cylinder. A carrying bag is used to support and transport the cylinder. The RIT-PAK III portable air supply is equipped with both LOW pressure and HIGH pressure supplies as follows:

– LOW PRESSURE AIR SUPPLY HOSE with a pressure reducer and low pressure hose from the reducer to a dual manifold with both male and female quick disconnect couplings for a variety of connections to a SCOTT respirator. The use of these components is covered in the LOW PRESSURE AIR SUPPLY section of this instruction. Additional ports are provided on the LOW pressure air supply hose manifold for the installation of other quick disconnect fittings. Refer to the INSTALLATION OF ALTERNATE QUICK DISCONNECT COUPLINGS section of this instruction for details.

– HIGH PRESSURE AIR SUPPLY HOSE* is equipped with a coupling which will fit all respirators in compliance with NFPA 1981 (edition 2002 or later) which are fitted with a Rapid Intervention Crew/Company Universal Air Connection (RIC UAC) System. The integral dust cover is used to vent the residual air pressure from the system after the cylinder valve has been closed. The use of this feature is covered in the HIGH PRESSURE AIR SUPPLY section of this instruction.

The SCOTT RIT-PAK III portable air supply is available in **three pressure models** for use with the following air cylinders:

- RIT-PAK III 2216 psi for use with SCOTT 2.2 cylinders with an air supply rated at 30 minutes.
- RIT-PAK III 4500 psi for use with SCOTT 4.5 cylinders with an air supply rated at 30, 45, or 60 minutes
- RIT-PAK III 5500 psi for use with SCOTT 5.5 cylinders with an air supply rated at 30, 45, 60, or 75 minutes

The appropriate cylinder and valve assembly must be purchased separately.

The Pressure Reducer Assembly is labeled with the pressure the equipment is designed to use.

A remote gauge console is provided with an analog gauge showing the total available air pressure left in the breathing air cylinder as well as an LED DISPLAY with lights indicating the remaining air in the same format as the heads-up display found on many SCBA respirators. The remote gauge console is mounted on the outside of the bag so it is available to view at all times. The pressure reducer is also equipped with a BELL to signal when the air pressure in the breathing air cylinder has dropped below one-quarter of full. Depending on how the RIT-PAK III portable air supply is used, the end-of-service alarm on the respirator may or may not operate. See the LOW PRESSURE AIR SUPPLY and the HIGH PRESSURE AIR SUPPLY usage sections of this instruction for recommendations.

WARNING

THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY AND ITS ACCESSORIES OR OPTIONS ARE NOT NIOSH OR NFPA APPROVED. THE RIT-PAK III PORTABLE AIR SUPPLY IS INTENDED FOR ONLY USE AS AN EMERGENCY AIR SUPPLY SOURCE. THE ADDITION OF THE OPTIONAL EMERGENCY FACEPIECE AND EMERGENCY BREATHING REGULATOR PROVIDE GREATER OPTIONS FOR USE OF THE EQUIPMENT, BUT THE RIT-PAK III PORTABLE AIR SUPPLY IS NOT A COMPLETE RESPIRATOR. IMPROPER USE OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY IS INTENDED FOR EMERGENCY USE ONLY TO SUPPLY BREATHING AIR TO A SINGLE RESPIRATOR USER WHILE BEING EVACUATED FROM AN ATMOSPHERE REQUIRING RESPIRATORY PROTECTION. DO NOT USE ANY ADDITIONAL HOSES, ADAPTERS, OR CONNECTORS EXCEPT AS DIRECTED BY THIS INSTRUCTION.

ANY USE OF THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY BEYOND THAT WHICH IS DESCRIBED IN THIS INSTRUCTION COULD RESULT IN A MALFUNCTION WHICH MAY LEAD TO SERIOUS INJURY OR DEATH.

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The SCOTT RIT-PAK III portable air supply may be equipped with an optional Emergency facepiece and Emergency breathing regulator. The Emergency facepiece is a special configuration of a SCOTT Model AV-3000 SureSeal facepiece. The Emergency facepiece **is not** a NIOSH approved configuration and is intended ONLY for emergency use as part of the RIT-PAK III portable air supply. The Emergency facepiece has no nose cup or voicemitters and it has a special head harness. The Emergency breathing regulator ***does not*** have an end-of-service time indicator and is intended ONLY for emergency use on either the optional Emergency facepiece or on compatible SCOTT full facepieces as part of the RIT-PAK III portable air supply.

The SCOTT RIT-PAK III portable air supply carrying bag has dedicated rigid compartments to store the HIGH and LOW pressure supply hoses as well as room for additional equipment such as the optional Emergency facepiece and Emergency breathing regulator. The top cover of the bag has two additional soft storage compartments. The bottom and sides of the bag are protected by a durable plastic skid plate. Multiple attachment rings are provided on the sides and the ends of the bag to attach a variety of straps and handles to carry or pull the bag as needed. A long shoulder strap is standard and other straps are optional. The attachment rings may also be used to hold any required tools or accessories.

TRAINING REQUIRED BEFORE USE

The SCOTT RIT-PAK III portable air supply must only be used by trained personnel as part of a complete respiratory protection program. This program must include, but not be limited to, familiarity with the SCOTT respiratory protection equipment in use within the program and how the SCOTT RIT-PAK III portable air supply can be used to connect to that equipment. The SCOTT RIT-PAK III must not be used for any other purpose than the emergency supply of breathing air from the specified cylinder and valve assemblies.

Every emergency situation is unique. The users of this equipment must be fully trained to assess the situation and the risks involved and decide how best to use this equipment.

Special instruction and care is required for use of this equipment. When the system is pressurized, the LOW pressure air supply hose can release compressed air at 160 psi. Compressed air pointed at unprotected skin may cause transmission of air into the blood stream causing air embolism and other tissue damage. Compressed air introduced into a body cavity may cause serious or fatal injury.

Always position the SCOTT RIT-PAK III portable air supply on a safe, flat, level surface where the unit or cylinder will not shift or slide. Avoid direct contact with fire or flame.

Use care when handling the LOW pressure air supply hose or the HIGH pressure air supply hose to avoid snagging or tangling of the hoses and misuse or damage which could result in partial or complete loss of breathing air or the uncontrolled release of compressed air. Any damage to the hoses such as cuts or breakage, or damage to the pressure reducer assembly or quick disconnects may result in uncontrolled air loss from the respirator.

WARNING

DO NOT OPERATE THIS EQUIPMENT WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATIONS OR SUBSTANCES WHICH MAY AFFECT VISION, DEXTERITY, OR JUDGMENT. USERS OF THIS EQUIPMENT MUST BE IN GOOD PHYSICAL AND MENTAL HEALTH IN ORDER TO OPERATE SAFELY. DO NOT USE THIS EQUIPMENT WHEN FATIGUE PREVENTS SAFE OPERATION. STAY ALERT WHEN OPERATING THIS EQUIPMENT. INATTENTION OR CARELESSNESS WHILE OPERATING THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

QUESTIONS OR CONCERNS

If you have any questions or concerns regarding use of this equipment, contact your authorized SCOTT distributor, or contact SCOTT at 1-800-247-7257 (or 704-291-8300 outside the continental United States).

BASIC PRINCIPLES OF OPERATION

The RIT-PAK III portable air supply pneumatic system consist of both high and low pressure outlets with a single connection to the breathing air cylinder. The hoses are stored in built-in compartments within the RIT-PAK III carrying bag. When the RIT-PAK III portable air supply cylinder valve is opened, breathing air is available through both high and low pressure outlets. The LED DISPLAY will initialize with all five lights ON for twenty seconds followed by a display of cylinder supply level.

The SCOTT RIT-PAK III portable air supply is designed to provide a variety of connection options to supply breathing air as either

1) as a **LOW PRESSURE** air supply source to replace the depleted air cylinder of a user's AIR-PAK SCBA or to supply breathing air to an individual with a facepiece and regulator,

or

2) as a **HIGH PRESSURE** air supply source to partially recharge the depleted air cylinder of a user's AIR-PAK SCBA.

Various connections with the user's respirator are possible with the RIT-PAK III portable air supply. In addition, an Emergency facepiece and Emergency breathing regulator may be used to supply breathing air directly to an individual.

The cylinder pressure gauge has an LED DISPLAY with lights to provide a visual monitor of the air supply in the cylinder and valve assembly. The LED DISPLAY is a convenience feature that is not critical to the operation of the air supply. If the LED DISPLAY is not operating as described in this instruction and the pressure gauge and the rest of the air supply is functioning normally, the user must decide if there is a compelling reason to proceed with use of the RIT-PAK III portable air supply.

The pressure reducer is also equipped with a BELL to signal when the air pressure in the breathing air cylinder has dropped below one-quarter of full.

It is essential that one properly trained person on the Rapid Intervention Team be assigned to monitor the actual volume of remaining air in the SCOTT RIT-PAK III portable air supply cylinder and provide for the safety of the respirator user in ample time to complete the exit of the hazardous atmosphere or to replace the SCOTT RIT-PAK III air supply cylinder with one that is fully charged. Depending on how the RIT-PAK III portable air supply is used, the end-of-service alarm on the respirator may or may not operate. See the LOW PRESSURE AIR SUPPLY and the HIGH PRESSURE AIR SUPPLY usage sections of this instruction for recommendations.

When the cylinder valve is closed, residual air must be vented from the system to allow the electronics to shut down and preserve battery life. Vent the system one of two ways:

1. On the RIC UAC airline assembly, press the VENT button in the center of the dust cover on the high pressure coupling,
2. If a breathing regulator is attached to the low pressure airline assembly, open the purge valve on the breathing regulator to vent.

Carefully follow the instructions for storage of each of the air supply lines and the optional Emergency facepiece and Emergency breathing regulator to assure that they can be properly deployed when they are needed.

SERVICE LIFE

The SCOTT RIT-PAK III portable air supply is equipped with attachments to provide breathing air to a respirator user through specific connections to the respirator. An optional Emergency facepiece and Emergency breathing regulator are available to evacuate someone who either has no respirator or whose respirator has no couplings to connect to the RIT-PAK III portable air supply. Before entering an area requiring respiratory protection, determine which use of the SCOTT RIT-PAK III portable air supply will apply in the situation.

The Rapid Intervention Team Must be thoroughly familiar with the operation and application of the SCOTT RIT-PAK III portable air supply before entering the area requiring respiratory protection.

The SCOTT RIT-PAK III portable air supply is available in three different configurations:

– The RIT-PAK III 2216 psi model is intended to accommodate a SCOTT 2.2 - 2216 psi cylinder rated at 30 minute duration;
– The RIT-PAK III 4500 psi model is intended to accommodate a SCOTT 4.5 - 4500 psi cylinder rated at 30, 45, or 60 minute duration;
– The RIT-PAK III 5500 psi model is intended to accommodate a SCOTT 5.5 - 5500 psi cylinder rated at 30, 45, 60, or 75 minute duration.

This equipment is only to be used and maintained by trained personnel.

SERVICE LIFE CONTINUED...

The user should not expect to obtain exactly the cylinder rated duration from this air supply on each use. The effort being expended may be more or less strenuous than that used in the National Institute of Occupational Safety and Health (NIOSH) respirator testing. Where the effort is more strenuous, the duration may be shorter, possibly as short as one-half the nominal service time or less. Always verify that the SCOTT RIT-PAK III portable air supply cylinder is fully charged before entering the hazardous atmosphere.

The duration of use of the respirator supplied by the SCOTT RIT-PAK III portable air supply will depend on such factors as:

1. the capacity of the cylinder installed,
2. the degree of physical activity of the user;
3. the physical condition of the user;
4. the degree to which the user's breathing is affected by excitement, fear or other emotional factors;
5. the degree of training or experience which the user has with this or similar equipment;
6. whether or not the cylinder is fully charged at the start of the evacuation effort;
7. the possible presence in the compressed air of carbon dioxide concentrations greater than .04% normally found in atmospheric air;
8. the atmospheric pressure; for example, if used in a pressurized tunnel or caisson at 2 atmospheres absolute (15 psi gauge) the duration will be one-half as long as when used at 1 atmosphere; and at 3 atmospheres will be one-third as long;
9. loose or improperly fitting facepiece;
10. the condition of the respirator being used.

When the SCOTT RIT-PAK III portable air supply is used with the HIGH pressure air supply hose to recharge a depleted cylinder, do not expect to obtain either cylinder rated duration after the transfer. The amount of air transferred to the cylinder being charged is dependent on the size of the cylinder and the amount of air left in the cylinder being charged and will always be less than either cylinder rating.

WARNING

THE END-OF-SERVICE ALARM ON THE USER'S RESPIRATOR MAY NOT OPERATE NORMALLY WHEN BEING SUPPLIED BY THE RIT-PAK III PORTABLE AIR SUPPLY. FAILURE TO ASSIGN A PROPERLY TRAINED PERSON TO MONITOR THE AIR SUPPLY IN THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY AND/OR FAILURE TO MAINTAIN EFFECTIVE COMMUNICATIONS WITH THE RESPIRATOR USER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

WARNING

NEVER ENTER A HAZARDOUS ATMOSPHERE WITH A CYLINDER THAT IS NOT FULLY CHARGED. USE OF A CYLINDER THAT IS LESS THAN FULLY CHARGED MAY RESULT IN REDUCED DURATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

USE OF ALTERNATE CYLINDERS

If SCOTT cylinder and valve assemblies of different pressures are used inadvertently or in emergency situations, the following conditions will be observed:

- A fully charged 2216 psig rated cylinder or 3000 psig rated cylinder installed in a RIT-PAK III 4500 psi Portable Air Supply will cause the remote pressure gauge to indicate less than "FULL" and the low cylinder LED DISPLAY alert will activate well before approximately three quarters of the air has been consumed.
- A fully charged 3000 psig rated cylinder installed in a RIT-PAK III 2216 psi Portable Air Supply will cause the remote gauge to indicate more than "FULL" and the end-of-service indicator alarms will not activate until MORE than approximately three quarters of the air supply has been consumed.
- A 4500 or 5500 psig rated cylinder cannot be installed on a RIT-PAK III 2216 psi Portable Air Supply. The high pressure coupling between the respirator and the cylinder will not seal when the coupling is threaded to the cylinder and a large, high volume air leak will occur at the cylinder connection when the cylinder is opened. This is intended to prevent the lower pressure respirator components from being pressurized to the higher pressure.
- A fully charged 5500 psig rated cylinder installed in a RIT-PAK III 4500 psi Portable Air Supply will cause the remote gauge to indicate more than "FULL" and the end-of-service indicator alarms will not activate until MORE than approximately three quarters of the air supply has been consumed.
- A fully charged 2216 psig rated cylinder or 3000 psig rated cylinder or 4500 psig cylinder installed in a RIT-PAK III 5500 psi Portable Air Supply will cause the remote pressure gauge to indicate less than "FULL" and the low cylinder LED DISPLAY alert will activate well before approximately three quarters of the air has been consumed.

THE USE OF ANY AIR CYLINDER WITH A DIFFERENT PRESSURE FROM THE PRESSURE INTENDED FOR USE WITH THE SPECIFIC SCOTT RIT-PAK III PORTABLE AIR SUPPLY MODEL BEING USED WILL RESULT IN CHANGES TO THE BEHAVIOR OF THE REMOTE GAUGE AND/OR THE END-OF-SERVICE ALARMS. IN THESE SITUATIONS, A PERSON MUST MONITOR THE AIR PRESSURE GAUGE **ON THE CYLINDER** TO DETERMINE THE AIR REMAINING IN THE CYLINDER. FAILURE TO PROPERLY MONITOR THE AIR REMAINING IN THE CYLINDER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR.

CAUTION

THE USE OF ANY AIR CYLINDER OTHER THAN A CYLINDER AND VALVE ASSEMBLY INTENDED FOR USE WITH THE SPECIFIC SCOTT RIT-PAK III PORTABLE AIR SUPPLY MODEL BEING SERVICED MAY RESULT IN LOSS OF AIR FROM THE CYLINDER OR IMPROPER OPERATION OF THE EQUIPMENT.

WARNING

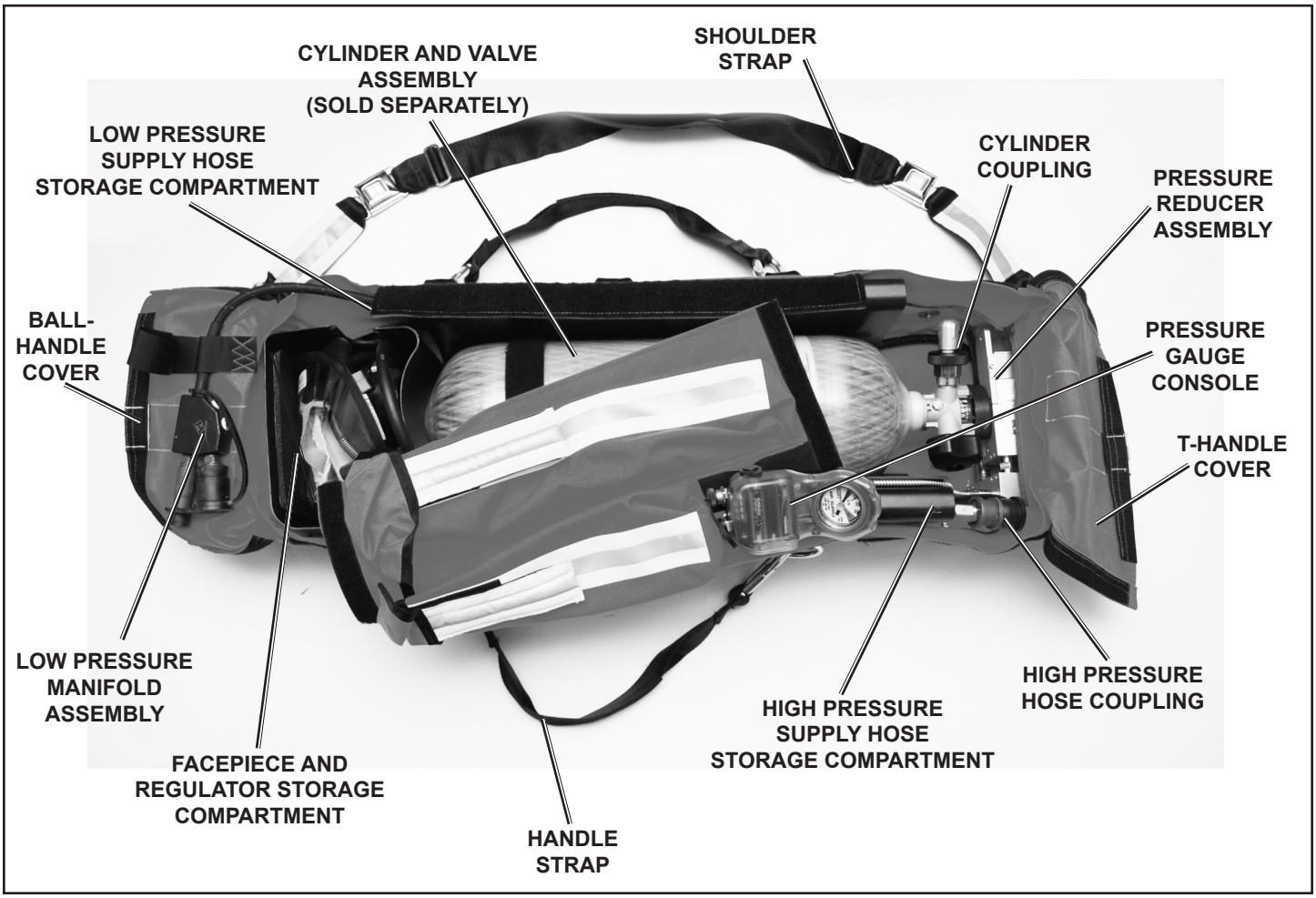
THE USE OF ANY AIR CYLINDER WITH A DIFFERENT PRESSURE FROM THE PRESSURE INTENDED FOR USE WITH THE SPECIFIC SCOTT RIT-PAK III PORTABLE AIR SUPPLY MODEL BEING USED WILL RESULT IN CHANGES TO THE BEHAVIOR OF THE REMOTE GAUGE AND/OR THE END-OF-SERVICE ALARMS. A PERSON MUST MONITOR THE AIR PRESSURE GAUGE ON THE CYLINDER TO DETERMINE THE AIR REMAINING IN THE CYLINDER. FAILURE TO PROPERLY MONITOR THE AIR REMAINING IN THE CYLINDER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

WARNING

THE INFORMATION IN THIS INSTRUCTION IS MEANT TO SUPPLEMENT, NOT REPLACE, THE INSTRUCTIONS, TRAINING, SUPERVISION, MAINTENANCE, AND OTHER ELEMENTS OF YOUR ORGANIZED RESPIRATORY PROTECTION PROGRAM. FAILURE TO HEED ANY WARNINGS IN THIS INSTRUCTION MAY RESULT IN SERIOUS INJURY OR DEATH.

PRIMARY COMPONENTS OF THE RIT-PAK III PORTABLE AIR SUPPLY

Use the following illustrations to identify and become familiar with the various components of the RIT-PAK III portable air supply:



RIT-PAK III PORTABLE AIR SUPPLY
FIGURE 1

NOTE

AIR CYLINDER AND VALVE ASSEMBLY SOLD SEPARATELY
FACEPIECE AND REGULATOR ARE OPTIONAL
HANDLE STRAPS (PAIR) ARE OPTIONAL

NOTE

THE PRESSURE REDUCER ASSEMBLY IS LABELED WITH THE PRESSURE THE EQUIPMENT IS DESIGNED TO USE.

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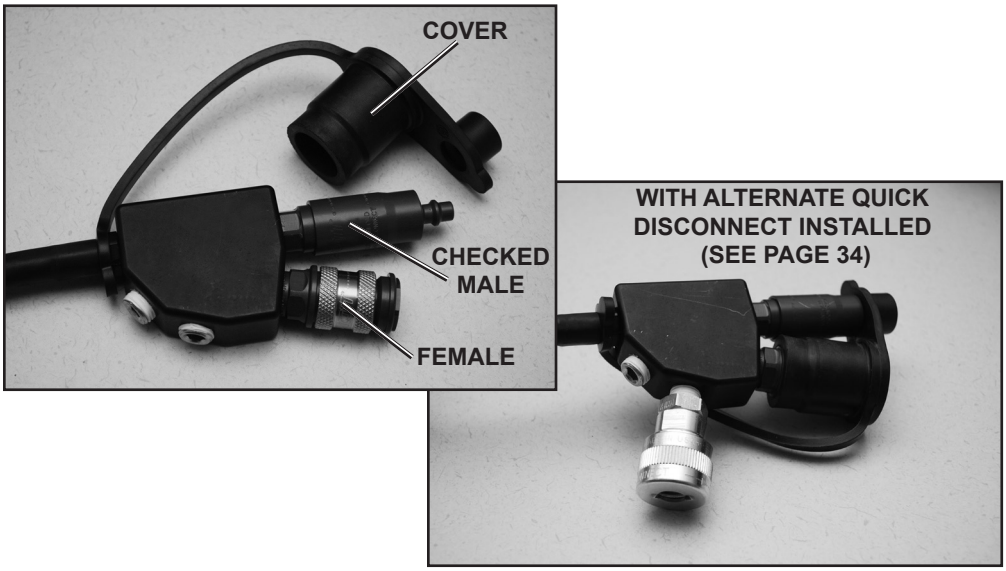
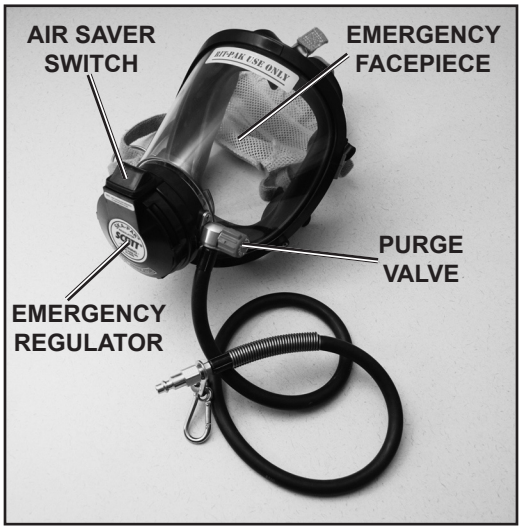
HIGH PRESSURE CONNECTOR
FIGURE 2



DUAL LOW PRESSURE CONNECTOR
FIGURE 3



EMERGENCY FACEPIECE AND REGULATOR
FIGURE 4

BATTERY INSTALLATION

The RIT-PAK III Portable Air Supply requires two (2) AA batteries in the remote gauge console for operation of the air cylinder volume LED DISPLAY indicator lights. The batteries should be replaced only by a trained maintenance technician in a clean area known to be nonflammable.

Install or replace the batteries as follows:

1. Locate the remote gauge console.
2. Using a Phillips driver, remove *both* battery caps holding. See FIGURE 5.

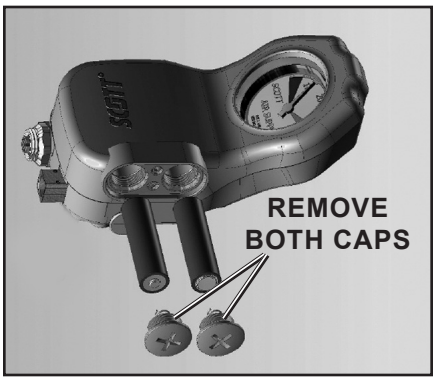


FIGURE 5

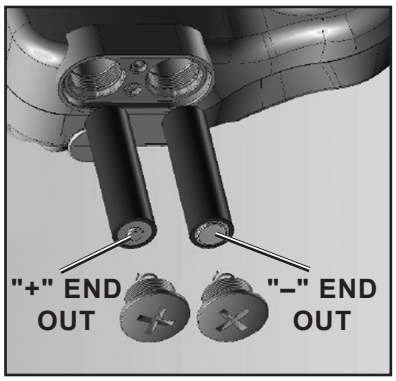


FIGURE 6

3. If previously installed, slide the two batteries out of the battery compartments.
4. For best results, replace batteries only with a pair of the following 1.5 volt AA batteries:
   - Eveready[1] Energizer Alkaline EN91
   - Eveready Energizer Alkaline E91.
   - Duracell[2] Alkaline MN1500
   - Duracell Alkaline MX1500
   - Duracell Alkaline PC1500

   Be sure batteries are properly oriented in battery compartments with the "+" end and the "–" end of each as shown in FIGURE 6.
5. The battery covers must be installed so that they are water tight after replacement. Clean the inside edge of each battery compartment and seal around the outside of the cover by wiping with a clean damp cloth to remove any dirt or foreign matter which might prevent a proper seal. Check cover gasket for tears or cuts. If damage is found, remove equipment from service and tag for repair by authorized personnel.
6. When cover is placed in position and the batteries are properly installed, all lights in the LED DISPLAY will light for approximately twenty (20) seconds to verify operation.
7. Thread the battery cover screws in until the edge of each battery cover is touching the face of the battery compartment. Tighten the screw HAND TIGHT only. DO NOT OVERTIGHTEN. Perform the REGULAR OPERATIONAL INSPECTION to verify proper operation of the LED DISPLAY.

WARNING

REGULARLY INSPECT THIS EQUIPMENT, INCLUDING THE GAUGE CONSOLE AND LED DISPLAY, AS DESCRIBED IN THIS INSTRUCTION AND CORRECT ANY DAMAGE FOUND. DO NOT SUBSTITUTE ANY PARTS OR COMPONENTS. USE ONLY THE BATTERIES AS SPECIFIED IN THIS INSTRUCTION. THE FAILURE TO CORRECT ANY DAMAGE, THE INSTALLATION OF INCORRECT BATTERIES, OR THE SUBSTITUTION OF ANY OTHER COMPONENTS MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

WARNING

BATTERIES MUST ONLY BE CHANGED IN AN AREA KNOWN TO BE NONFLAMMABLE. CHANGING THE BATTERIES IN A FLAMMABLE ATMOSPHERE MAY CAUSE AN IGNITION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

CAUTION

USE BATTERIES ONLY FROM THE LIST PROVIDED, DO NOT MIX OLD BATTERIES WITH UNUSED BATTERIES, AND DO NOT MIX BATTERIES FROM DIFFERENT MANUFACTURERS.

[1] Energizer is a registered trademark of Eveready Battery Company, Inc., St. Louis, MO.
[2] Duracell is a registered trademark of The Procter & Gamble Company, Cincinnati, OH.

THE LED DISPLAY

The cylinder pressure remote gauge console has an LED DISPLAY with lights to provide a visual monitor of the air supply in the cylinder and valve assembly. The LED DISPLAY appears across the bottom of the gauge console and uses the same sequence of lights found on a standard heads-up display. The LED DISPLAY consists of four rectangular lights to represent the cylinder pressure at FULL, THREE-QUARTERS, ONE-HALF, and ONE-QUARTER. A fifth round red light indicates LOW BATTERY. The LED DISPLAY operates as follows:

1. When air cylinder is opened, the LED DISPLAY will initialize and illuminate all five lights for twenty (20) seconds. Operation of all five lights must be verified every time the RIT-PAK III Portable Air Supply is used and with every REGULAR OPERATIONAL INSPECTION. If the lights do not operate as described here, do not use the RIT-PAK III unless there are compelling reasons for using the equipment without the display lights. Remove the respirator from service and tag for repair by authorized personnel.

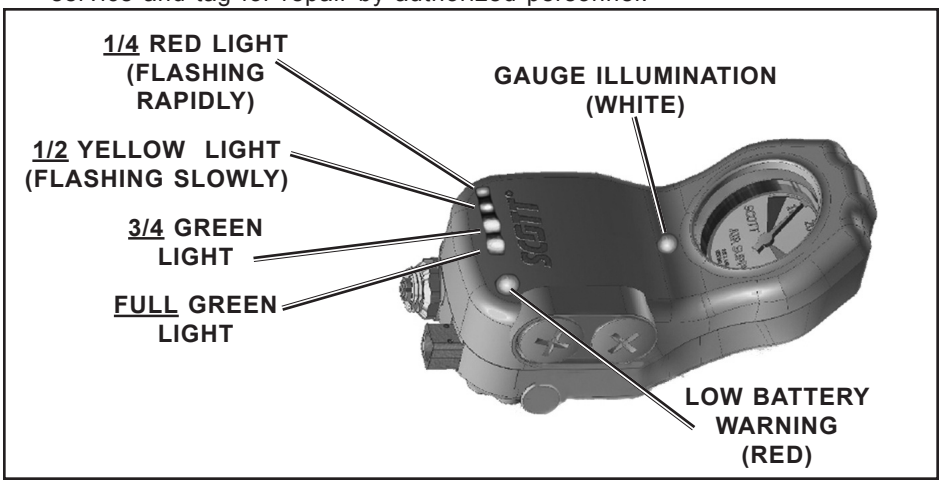


FIGURE 7
LED Display

2. After initialization, the rectangular indicator lights will show the level of the air supply in the cylinder as follows:
   a) FULL cylinder is indicated by the two green lights glowing near the center of the display.
   b) THREE-QUARTERS cylinder is indicated by a single green light glowing.
   c) ONE-HALF cylinder is indicated by the yellow light flashing slowly at once a second.
   d) ONE-QUARTER cylinder end-of-service time indicator is indicated by the red light at the far left flashing rapidly at ten times a second. WHEN THIS WARNING LIGHT IS FLASHING RAPIDLY, THERE IS LESS THAN ONE-QUARTER OF THE TOTAL AIR SUPPLY LEFT IN THE AIR CYLINDER. THE BELL ALARM WILL ALSO SOUND AT THIS POINT.
3. When the batteries require changing, the round LOW BATTERY indicator at the right of the display will light for twenty (20) seconds and then begin to flash slowly at once a second. When the LOW BATTERY indicator is actuated, the batteries still have sufficient life to operate the LED DISPLAY longer than the longest duration cylinder that could be used with the RIT-PAK III Portable Air Supply. However, the batteries must be changed immediately upon termination of use of the equipment. See the BATTERY REPLACEMENT section of this instruction.

The LED DISPLAY is a convenience feature that is not critical to the operation of the air supply. If the LED DISPLAY is not operating as described in this instruction and pressure gauge and the rest of the air supply is functioning normally, the user must decide if there is a compelling reason to proceed with use of the RIT-PAK III portable air supply.

WARNING

IF THE LED DISPLAY LIGHTS DO NOT OPERATE AS DESCRIBED IN THESE INSTRUCTIONS, DO NOT USE THE AIR SUPPLY UNLESS THERE IS A COMPELLING REASON TO DO SO. REMOVE THE EQUIPMENT FROM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF AN AIR SUPPLY WITH A MALFUNCTIONING LED DISPLAY MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

REGULARLY INSPECT THE RIT-PAK III PORTABLE AIR SUPPLY, INCLUDING THE LED DISPLAY, AS DESCRIBED IN THIS INSTRUCTION AND CORRECT ANY DAMAGE FOUND. DO NOT SUBSTITUTE ANY PARTS OR COMPONENTS. USE ONLY THE BATTERIES AS SPECIFIED IN THIS INSTRUCTION. THE FAILURE TO CORRECT ANY DAMAGE, THE INSTALLATION OF INCORRECT BATTERIES, OR THE SUBSTITUTION OF ANY OTHER COMPONENTS MAY IMPAIR THE OPERATION OF THE UNIT AND MAY LEAD TO A FIRE OR AN EXPLOSION WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

WARNING

THE LED DISPLAY IS A CONVENIENCE FEATURE THAT IS NOT CRITICAL TO THE OPERATION OF THE AIR SUPPLY. IF THE LED DISPLAY IS NOT OPERATING AS DESCRIBED IN THIS INSTRUCTION AND PRESSURE GAUGE AND THE REST OF THE AIR SUPPLY IS FUNCTIONING NORMALLY, THE USER MUST DECIDE IF THERE IS A COMPELLING REASON TO PROCEED WITH USE OF THE RIT-PAK III PORTABLE AIR SUPPLY. FAILURE TO PROPERLY ASSESS AN EMERGENCY SITUATION AND THE OPERATIONAL CAPABILITIES OF THE EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

AIR CYLINDER INSTALLATION

The SCOTT RIT-PAK III portable air supply is available in **three pressure models** for use with the following air cylinders:

- RIT-PAK III 2216 psi for use with SCOTT 2.2 cylinders with an air supply rated at 30 minutes.
- RIT-PAK III 4500 psi for use with SCOTT 4.5 cylinders with an air supply rated at 30, 45, or 60 minutes
- RIT-PAK III 5500 psi for use with SCOTT 5.5 cylinders with an air supply rated at 30, 45, 60, or 75 minutes

Other cylinders may be used provided:

- they match the air pressure rating that the model was designed to use,
- they do not exceed the size capacity of the carrying bag,
- they are equipped with the proper CGA fitting to attach to the cylinder coupling.

NOTE

USE ONLY BREATHING AIR CYLINDERS THAT FIT IN THE CARRYING BAG. IF THE CYLINDER DOES NOT FIT FULLY IN THE CARRYING BAG, DO NOT USE THE CYLINDER.

CYLINDER INSPECTION

1. Check the latest cylinder hydrostatic test date to ensure it is current. All breathing air cylinders used SCOTT respirator equipment must be visually inspected regularly and hydrostatically tested by a licensed cylinder re-tester in accordance with the appropriate US Department of Transportation (DOT) specification or applicable DOT exemption, or in accordance with the appropriate Transport Canada (TC) Permit of Equivalent Level of Safety. For a complete listing of retest date requirements, refer to the current revision of *Safety Precautions for AIR-PAK Cylinders*, Scott P/N 89080-01, available on request from Scott Safety. Composite cylinders (those cylinders utilizing fiber over wrap) must be tested in accordance with the DOT exemption status up to the maximum life of fiber over-wrapped cylinders which, at the time of the publication of this instruction, is 15 years from the date of manufacture. The date of manufacture marked on the cylinder is also the date of the first hydrostatic test. It is the responsibility of your organized respiratory protection program to arrange for visual inspection and hydrostatic testing of cylinders by a licensed re-tester.
2. Visually inspect cylinder and valve assembly for physical damage such as dents or gouges in metal or in composite wrapping. Cylinders which show physical damage or exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, pressure gauge lens melted or elastomeric bumper distorted, and cylinders which show evidence of exposure to chemicals such as discoloration, cracks in the cylinder or the composite wrapping or gel top coat, peeling of the outer layers of the composite wrapping and/or bulging of the cylinder wall, shall be removed from service and emptied of compressed air. Refer to current applicable publications on compressed gas cylinder inspection available from Compressed Gas Association Inc., 1725 Jefferson Davis Hwy., Suite 1004, Arlington, VA 22202, (703-412-0900) for a detailed explanation of cylinder inspection procedures.
3. Check cylinder pressure gauge for “FULL” indication. If cylinder pressure is less than “FULL,” replace with a fully charged cylinder. See FIGURE 1. Charge cylinders with breathing air rated as Grade D or better per CGA specification G-7.1 with a dew point of -65° F / -54° C or lower. DO NOT FILL WITH OXYGEN.

   The SCOTT RIT-PAK III portable air supply is designed to fit **only** the following SCOTT cylinders:
   - SCOTT 2216 psi 2.2 cylinders with an air supply rated at 30 minutes.
   - SCOTT 4500 psi 4.5 cylinders with an air supply rated at 30, 45, or 60 minutes
   - SCOTT 5500 psi 5.5 cylinders with an air supply rated at 30, 45, 60, or 75 minutes

CYLINDER INSTALLATION

Install the cylinder and valve assembly in the RIT-PAK III portable air supply as follows:

1. Open the top of the carrying bag by releasing the hook-and-loop fastener strips on the pressure reducer compartment and on the long edge of the cylinder compartment cover.
2. Loosen the two cylinder straps by lifting the ends and releasing the hook-and-loop fastener and lay the ends of the straps out each side of the bag.
3. Inspect the equipment and verify that it is in suitable condition for use. Refer to the REGULAR OPERATIONAL INSPECTION of this instruction. If any damage is found, remove the unit from service and tag for repair by authorized personnel.

WARNING

THE USE OF ANY AIR CYLINDER WITH A DIFFERENT PRESSURE FROM THE PRESSURE INTENDED FOR USE WITH THE SPECIFIC SCOTT RIT-PAK III PORTABLE AIR SUPPLY MODEL BEING USED WILL RESULT IN CHANGES TO THE BEHAVIOR OF THE REMOTE GAUGE AND/OR THE END-OF-SERVICE ALARMS. SEE THE *USE OF ALTERNATE CYLINDERS* SECTION OF THIS INSTRUCTION. A PERSON MUST MONITOR THE AIR PRESSURE GAUGE ON THE CYLINDER TO DETERMINE THE AIR REMAINING IN THE CYLINDER. FAILURE TO PROPERLY MONITOR THE AIR REMAINING IN THE CYLINDER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

WARNING

CYLINDER MUST HAVE A CURRENT HYDROSTATIC TEST DATE. IMPROPERLY INSPECTED CYLINDERS THAT ARE DAMAGED MAY SUDDENLY LEAK OR RUPTURE IF CHARGED WITH COMPRESSED AIR AND CAUSE SERIOUS INJURY OR DEATH.

WARNING

NEVER USE A CYLINDER WHICH EXHIBITS DAMAGE CONDITIONS. CYLINDERS WHICH EXHIBIT DAMAGE CONDITIONS MAY SUDDENLY LEAK OR RUPTURE IF CHARGED WITH COMPRESSED AIR AND CAUSE SERIOUS INJURY OR DEATH.

WARNING

DO NOT USE OXYGEN! SUPPLYING THE RESPIRATOR WITH OXYGEN MAY CAUSE SICKNESS OR MAY CAUSE A FIRE OR EXPLOSION RESULTING IN SERIOUS INJURY OR DEATH.

WARNING

USE ONLY AIR DRIED TO A DEW POINT OF -65° F / -54° C OR LESS. MOISTURE IN AIR UNDER PRESSURE CAN FREEZE EVEN AT AMBIENT TEMPERATURES WELL ABOVE +32° F / 0° C. FAILURE TO ENSURE THE AIR SUPPLY IS FREE OF CONDENSED MOISTURE MAY CAUSE FREEZING AND PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR LEADING TO SERIOUS INJURY OR DEATH.

NOTE

DO NOT LIFT, TRANSPORT, OR HOLD THE CYLINDER BY THE HAND WHEEL.

4. Verify that the replacement cylinder is full and has a current hydrostatic test date and is free of damage as described in the CYLINDER INSPECTION section of this instruction.
5. Fit the cylinder into the cylinder compartment over the cylinder straps and with the cylinder valve next to the pressure reducer. See FIGURE 8. Pull up on each cylinder strap to ensure that they are not twisted or trapped under the cylinder.

FIGURE 8

6. Rotate the cylinder in the bag to align the cylinder valve with the coupling on the airline assembly.
7. Check to ensure the cylinder coupling is clean and free from dirt.
8. Check to ensure the coupling gasket is not damaged. See FIGURE 9.
9. Check to ensure the cylinder valve outlet is clean and free from dirt.

FIGURE 9

10. Thread the cylinder coupling clockwise onto the cylinder valve. The coupling must be hand tightened to the cylinder valve outlet. Wrenches shall not be used as damage to the coupling gasket may result.
11. Pull the straps around the cylinder snug and secure the hook-and-loop fasteners. Each pair of straps is made up of one that is all “hook” and the other that is all “loop” so it does not matter which half goes on top in each pair. See FIGURE 10.

CAUTION

HAND TIGHTEN ONLY. TIGHTENING WITH A WRENCH MAY CAUSE DAMAGE TO THE COUPLING GASKET.

FIGURE 10

Before placing the RIT-PAK III portable air supply into service, perform a REGULAR OPERATIONAL INSPECTION as described in this instruction.

The removed cylinder shall be inspected and refilled by authorized personnel. For more information, contact your authorized SCOTT distributor or call SCOTT Safety at 1-800-247-7257.

REGULAR OPERATIONAL INSPECTION

The following procedure shall be used when you first receive the SCOTT RIT-PAK III portable air supply and for inspection before each use. When not in use, this equipment must be inspected at least once a month. If any malfunction is noted, remove the SCOTT RIT-PAK III portable air supply from service and tag for repair by authorized personnel. For inspection, fully extend the LOW pressure and HIGH pressure supply hoses from their storage compartments.

After inspection and testing, refer to the PREPARATION FOR USE section of this instruction and carefully follow the instructions for storage of each of the air supply lines and the optional Emergency facepiece and Emergency breathing regulator to assure that they can be properly deployed when they are needed.

GENERAL INSPECTION

1. Verify that the unit was properly cleaned and decontaminated after previous use.
2. If a cylinder is installed, refer to the AIR CYLINDER INSTALLATION section of this instruction for details of cylinder inspection and proper cylinder installation.
3. Visually inspect the SCOTT RIT-PAK III portable air supply Inspect the carrying bag for worn or damaged components.
   a) Check that the straps are not damaged and that all buckles and closures are operating properly.
   b) Verify that there are no rips in the fabric portions of the bag.
   c) Inspect the outer plastic shell for cracks or other damage,
   d) Inspect the inner compartments of the bag for damage or missing components.
4. Inspect the cylinder coupling on the RIT-PAK III pressure reducer to be certain the nipple seal is present and undamaged. Refer to the CYLINDER INSTALLATION section of this instruction for details. If the gasket is present and undamaged, align the coupling with the outlet of the cylinder valve and tighten the coupling to the cylinder valve by hand only. Wrenches shall not be used as damage to the coupling gasket may result.
5. Inspect the RIT-PAK III reducer and all LOW / HIGH pressure pipe and hose connections. If any pipe or hose connections are found to be loose, remove the unit from service and tag for repair by authorized personnel.

NOTE

FOR INSPECTION, FULLY EXTEND THE LOW PRESSURE AND HIGH PRESSURE SUPPLY HOSES FROM THEIR STORAGE COMPARTMENTS.

6. Check the HIGH pressure airline hose for cracks, cuts, abrasions, or other signs of damage. Check the high pressure coupling for bent or damaged components damage and for cleanliness. See the HIGH PRESSURE AIR LINE CONNECTION section of this instruction for details of operation of this adapter. See FIGURE 11.

FIGURE 11

WARNING

FOLLOW THE REGULAR OPERATIONAL INSPECTION PROCEDURE EXACTLY. IF ANY DISCREPANCY IS NOTED, DO NOT USE THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY. FAILURE TO PERFORM THE REGULAR OPERATIONAL INSPECTION MAY PERMIT A MALFUNCTION THAT MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

ALWAYS VERIFY THAT THE UNIT IS DECONTAMINATED AND THOROUGHLY CLEANED PRIOR TO EACH USE. FAILURE TO CLEAN AND DECONTAMINATE THE EQUIPMENT BEFORE USE MAY RESULT IN A MALFUNCTION OF THE EQUIPMENT AND/OR EXPOSE THE USERS TO CONTAMINANTS THAT COULD CAUSE SERIOUS INJURY OR DEATH.

WARNING

COMPRESSED AIR IS HAZARDOUS. WHEN THE RESPIRATOR IS PRESSURIZED, THE DUAL MANIFOLD ACCESSORY HOSE CAN EMIT 160 PSI OF COMPRESSED AIR IF THE CHECK VALVE SLEEVE ON THE MALE QUICK DISCONNECT IS RETRACTED. DO NOT RETRACT THE CHECK VALVE SLEEVE WHEN THE RESPIRATOR IS PRESSURIZED. DO NOT POINT THE DUAL MANIFOLD ACCESSORY HOSE AT ANYONE AND RETRACT THE CHECK VALVE SLEEVE. CARELESS HANDLING OF COMPRESSED AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

VERIFY THAT THE EXTERNAL CHECK VALVE SLEEVE ON THE MALE SIDE OF THE DUAL MANIFOLD MOVES FREELY AND SEALS PROPERLY WHEN THE MALE QUICK DISCONNECT IS NOT IN USE. FAILURE TO IDENTIFY A MALFUNCTION OF THE EXTERNAL CHECK VALVE SLEEVE MAY LEAD TO LOSS OF BREATHING AIR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

7. Check the LOW pressure air supply hose from the reducer to the dual manifold assembly for cracks, cuts, abrasions, or other signs of damage.
8. Check all LOW pressure quick disconnect couplings for damage and cleanliness. See LOW PRESSURE AIR LINE CONNECTION section of this instruction for additional details of operation of specific quick disconnects.
9. Inspect both the male and female quick disconnects on the dual manifold. Pay special attention to the following:
   a) Inspect the condition of the male quick disconnect for signs of wear. Particularly look for wear on the locking ridge as shown in FIGURE 12. If the coating is worn through and bare metal is showing, do not use the apparatus. Remove it from service and tag for repair.

FIGURE 12

   b) Inspect the operation of the external check valve sleeve on the male quick disconnect. If any damage is noted, do not use the apparatus. Remove it from service and tag for repair.
   c) Insect the operation of the female quick disconnect. While pushing the plug "D" into the socket, pull the locking sleeve "E" back toward the guard. The plug "D" will separate. To reconnect, push plug "D" into socket until the locking sleeve "E" pops forward. Test for proper engagement by tugging on the coupling. See FIGURE 13.

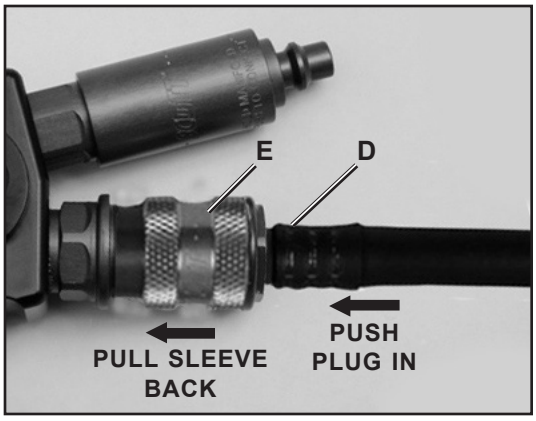


FIGURE 13
Operation of Pull-back Sleeve Quick Disconnect

10. Perform the OPERATIONAL TESTING as described in this instruction.

NOTE

AFTER INSPECTION AND TESTING, REFER TO THE PREPARATION FOR USE SECTION OF THIS INSTRUCTION AND CAREFULLY FOLLOW THE INSTRUCTIONS FOR STORAGE OF EACH OF THE AIR SUPPLY LINES TO ASSURE THAT THEY CAN BE PROPERLY DEPLOYED WHEN THEY ARE NEEDED.

WARNING

THE AIRLINE CONNECTIONS MUST BE CLEAN. DIRT OR FOREIGN MATERIAL IN THE AIR PASSAGE OF THE AIRLINE CONNECTION PLUG MAY CAUSE PARTIAL OR COMPLETE FAILURE OF THE RESPIRATOR IN HOSE LINE OPERATION OR IN SELF-CONTAINED OPERATION RESULTING IN SERIOUS INJURY OR DEATH.

WARNING

ANY COMPONENTS WHICH EXHIBIT SIGNS OF DAMAGE SHALL BE REMOVED FROM SERVICE FOR EVALUATION BY QUALIFIED PERSONNEL. USE OF DAMAGED COMPONENTS MAY RESULT A FAILURE OF THE EQUIPMENT WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

REGULAR OPERATIONAL INSPECTION
CONTINUED ON NEXT PAGE...

REGULAR OPERATIONAL INSPECTION CONTINUED...

INSPECTION OF THE OPTIONAL EMERGENCY FACEPIECE AND EMERGENCY BREATHING REGULATOR

The RIT-PAK III Portable Air Supply may be equipped with the optional Emergency facepiece and Emergency breathing regulator.

The facepiece is a special configuration of a SCOTT Model AV-3000 SureSeal facepiece. The facepiece is not a NIOSH or NFPA approved configuration and is intended ONLY for emergency use as part of the RIT-PAK III portable air supply. The Emergency facepiece has no nose cup or voicemitters and it has a special head harness.

Inspect the Emergency facepiece as follows:

1. Inspect the facepiece seal and other rubber components for deformation, wear, damage, or cracks.
2. Check that all harness anchors are present, firmly attached, and do not rotate.
3. Inspect the lens for cracks, gouges, scratches, or any condition that could impair the operation of the facepiece or the user's vision.
4. Inspect the facepiece port for damage where the regulator/adapter attaches. Inspect the two (2) support tabs and the facepiece around the mount for cracks or other signs of damage.

FIGURE 14

5. Inspect the lens frame bezel for damage such as cracks or distortion.
6. Check that both lens frame bezel screws are present and installed correctly.
7. Inspect the head harness for correct installation with all straps oriented correctly.
8. Inspect the head harness for damage or worn components.

If any other facepiece is used with the RIT-PAK III Portable Air Supply, refer to the REGULAR OPERATIONAL INSPECTION requirements provided with the facepiece. Any facepiece used with the RIT-PAK III Portable Air Supply must be complete and in serviceable condition with no worn, loose, or damaged components. If any damage is found, remove the facepiece from service and tag for repair by authorized personnel.

WARNING

THE OPTIONAL EMERGENCY FACEPIECE AND EMERGENCY BREATHING REGULATOR ARE NOT NIOSH APPROVED. USE ONLY FOR EMERGENCY APPLICATIONS WHEN NO OTHER FACEPIECE OR BREATHING REGULATOR ARE AVAILABLE TO PROVIDE BREATHING AIR TO THE RESCUE VICTIM. IMPROPER USE OF THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

The Emergency breathing regulator has no end-of-service time indicator and is intended ONLY for emergency use as part of the RIT-PAK III portable air supply.

Inspect the Emergency breathing regulator as follows:

1. Inspect the breathing regulator for damaged or missing components.
2. Inspect the gasket on the breathing regulator that seals against the facepiece for rips or damage that may break the seal.
3. Verify that the regulator gasket is properly installed around the outlet port of the regulator.
4. Verify that the purge valve (red knob) is not damaged and turns smoothly one-half turn from stop to stop.
5. Inspect the hose for cuts or damage.
6. Inspect the condition of the male quick disconnect for signs of wear. Particularly look for wear on the locking ridge as shown in FIGURE 15. If the coating is worn through and bare metal is showing, do not use the regulator assembly. Remove it from service and tag for replacement.

FIGURE 15
Inspecting Male Quick Disconnect

7. Attach the regulator to the facepiece as follows:
   a) Align the two flats of the regulator outlet port with the corresponding flats in the facepiece port (the red purge valve on the regulator will be in the 12 o'clock position). Insert the regulator into the facepiece port.
   b) Rotate the regulator counterclockwise (as viewed from inside of facepiece) until the red purge valve knob is on the left side of the facepiece. The lock tab on the regulator will lock into the facepiece retainer with a "click." When the lock tab is properly engaged, the regulator will not rotate.
8. Remove the breathing regulator from the facepiece by pulling back on the regulator retaining latch and rotating the regulator ¼ turn. Inspect the gasket on the breathing regulator again for rips or damage that may break the seal.
9. Perform the OPERATIONAL TESTING WITH BREATHING REGULATOR AND FACEPIECE as described in this instruction.

NOTE

AFTER INSPECTION AND TESTING, REFER TO THE PREPARATION FOR USE SECTION OF THIS INSTRUCTION AND CAREFULLY FOLLOW THE INSTRUCTIONS FOR STORAGE OF EACH OF THE AIR SUPPLY LINES TO ASSURE THAT THEY CAN BE PROPERLY DEPLOYED WHEN THEY ARE NEEDED.

REGULAR OPERATIONAL INSPECTION
CONTINUED ON NEXT PAGE...

REGULAR OPERATIONAL INSPECTION CONTINUED...

OPERATIONAL TESTING

For all OPERATIONAL TESTING, install a FULL air supply cylinder as described in these instructions. Verify that the reducer hose coupling is hand tightened to the cylinder valve outlet and pressurize the system by opening the cylinder valve fully (approximately two and one-half turns). Check all pipe and hose connections for leaks with a soap solution or similar leak detection liquid. If any leaks are found, remove the unit from service and tag for repair by authorized personnel.

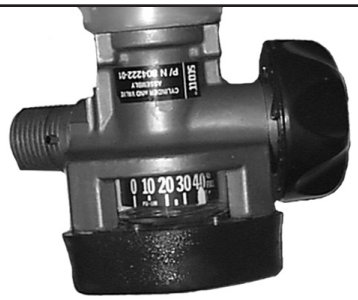


FIGURE 16
CYLINDER PRESSURE GAUGE ON CYLINDER VALVE (4500 PSI GAUGE ILLUSTRATED)

Inspect the operation of the RIT-PAK III portable air supply as follows:

1. Install a FULL air supply cylinder as described in these instructions. Verify that the reducer hose coupling is hand tightened to the cylinder valve outlet and pressurize the system by opening the cylinder valve fully (approximately two and one-half turns). Check all pipe and hose connections for leaks with a soap solution or similar leak detection liquid. If any leaks are found, remove the unit from service and tag for repair by authorized personnel.
2. Slowly open the cylinder valve by fully rotating the knob counterclockwise (approximately 2 1/2 turns). The LED DISPLAY will initialize with all five lights on for twenty seconds followed by display of cylinder supply level. If the LOW BATTERY light at the far right of the display remains lit or begins to flash, replace the batteries according to the BATTERY REPLACEMENT section of this instruction before proceeding.
3. Check that the remote pressure gauge is operating properly and that it reads within 10% of the value on the cylinder pressure gauge.
4. Push in and rotate the cylinder valve knob clockwise to close.
5. When the cylinder valve is fully closed, vent the system one of the two following ways:
   a) Carefully push in on the high pressure vent button on the high pressure connector dust cover.

   OR

   b) Open the purge valve on the facepiece mounted regulator.
6. As the air pressure vents from the system, the remote pressure gauge needle will swing from “FULL” and move towards “EMPTY.”
7. Observe the lights of the LED DISPLAY and verify that they light properly in descending order.
8. Stop venting when the gauge needle crosses the “¼” mark but before the beginning of the red “EMPTY” band. See FIGURE 17. The red light on the far left of the LED DISPLAY shall flash rapidly at ten (10) times per second.

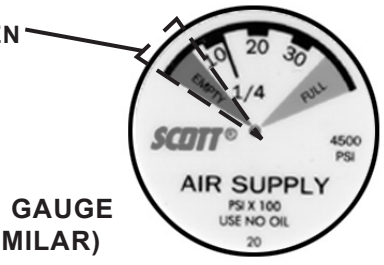


FIGURE 17
REMOTE GAUGE (MODEL 4.5 GAUGE SHOWN, OTHER MODELS SIMILAR)

9. After verifying that the LED DISPLAY is functioning properly, vent the remaining residual air pressure from the system. The LED DISPLAY shall cease operation when the system pressure drops to zero.

WARNING

CHECK ALL PIPE AND HOSE CONNECTIONS FOR LEAKS. IF ANY LEAKS ARE DETECTED, REMOVE THE EQUIPMENT FORM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL. AIR LEAKAGE COULD RESULT IN A LOSS OF AIR AND DIMINISHED PERFORMANCE OF THE EQUIPMENT IN AN EMERGENCY SITUATION WHICH COULD CAUSE SERIOUS INJURY OR DEATH. AIR LEAKAGE MAY ALSO RESULT IN SUDDEN UNEXPECTED RUSH OF HIGH PRESSURE AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

CAUTION

OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.

WARNING

IF THE LED DISPLAY INDICATOR LIGHTS DO NOT ACTUATE AS DESCRIBED IN THIS INSTRUCTION, DO NOT USE THE EQUIPMENT UNLESS THERE IS A COMPELLING REASON TO DO SO. REMOVE THE AIR SUPPLY FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF AN IMPROPERLY OPERATING AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

LEAKAGE OF AIR FROM THE AIR SUPPLY MAY INDICATE A POTENTIALLY SERIOUS DEFECT. AIR LEAKAGE MAY REDUCE THE DURATION OF USE. USE OF AN AIR SUPPLY EXHIBITING AN AIR LEAK MAY RESULT IN EXPOSING THE RESPIRATOR USER TO THE ATMOSPHERE THE EQUIPMENT IS INTENDED TO PROTECT AGAINST WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

OPERATIONAL TESTING WITH BREATHING REGULATOR AND FACEPIECE

If the RIT-PAK III Portable Air Supply is to be used with the optional breathing regulator and Emergency facepiece, include the following additional steps to the OPERATIONAL INSPECTION:

1. Attach the quick disconnect on the breathing regulator to the female side of the dual connector on the LOW pressure air supply hose. Verify a good connection by pulling on the connector.
2. If the regulator is not attached to the facepiece, proceed as follows:
   a) Align the two flats of the regulator outlet port with the corresponding flats in the facepiece port (the red purge valve on the regulator will be in the 12 o'clock position). Insert the regulator into the facepiece port.
   b) Rotate the regulator counterclockwise (as viewed from inside of facepiece) until the red purge valve knob is on the left side of the facepiece. The lock tab on the regulator will lock into the facepiece retainer with a "click." When the lock tab is properly engaged, the regulator will not rotate.
3. Check that the breathing regulator purge valve (red knob on regulator) is closed (full clockwise and pointer on knob upward).
4. Fully depress the center of the air saver/donning switch on the top of the regulator and release.
5. With the cylinder valve fully open (approximately 2 1/2 turns), don the facepiece or hold the facepiece to the face to affect a good seal. Inhale sharply to automatically start the flow of air. Breathe normally from the facepiece to ensure proper operation.
6. Remove facepiece from face. Air shall freely flow from the facepiece.
7. Fully depress the air saver/donning switch on the top of regulator and release. The flow of air from the facepiece shall stop. There shall be no leakage of air from any part of the portable air supply.
8. The red purge knob allows air to flow into the facepiece in an emergency without breathing on the respirator. The purge control is also used to release residual air from the respirator after the cylinder valve is turned off. Check the purge valve as follows:
   a) Rotate purge valve 1/2 turn counterclockwise (pointer on knob downward). Air shall freely flow from the regulator.
   b) Rotate purge valve 1/2 turn clockwise to full closed position (pointer on knob upward). Air flow from regulator shall stop.
9. Push in and rotate the cylinder valve knob clockwise to close. When the cylinder valve is fully closed, open the purge valve slightly to vent residual air pressure from system. The LED DISPLAY shall cease operation when the system pressure drops to zero.
10. When air flow stops completely, return purge valve to the fully closed position (pointer on knob upward).

IF ANY DISCREPANCY OR MALFUNCTION IS NOTED DURING THE INSPECTION, DO NOT USE THE EQUIPMENT. REMOVE THE EQUIPMENT FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL.

NOTE

AFTER INSPECTION AND TESTING, REFER TO THE PREPARATION FOR USE SECTION OF THIS INSTRUCTION AND CAREFULLY FOLLOW THE INSTRUCTIONS FOR STORAGE OF EACH OF THE AIR SUPPLY LINES TO ASSURE THAT THEY CAN BE PROPERLY DEPLOYED WHEN THEY ARE NEEDED.

Proceed to the PREPARATION FOR USE section of this instruction.

CAUTION

DO NOT USE TOOLS TO OPEN OR CLOSE THE PURGE VALVE. OPEN OR CLOSE BY USING FINGER-PRESSURE ONLY. ROTATION OR THE PURGE VALVE IS LIMITED TO 1/2 TURN. USE OF TOOLS TO OPEN OR CLOSE PURGE VALVE MAY RESULT IN DAMAGE TO THE PURGE VALVE.

CAUTION

OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.

WARNING

IF THE LED DISPLAY INDICATOR LIGHTS DO NOT ACTUATE AS DESCRIBED IN THIS INSTRUCTION, DO NOT USE THE EQUIPMENT UNLESS THERE IS A COMPELLING REASON TO DO SO. REMOVE THE AIR SUPPLY FROM SERVICE AND TAG IT FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF AN IMPROPERLY OPERATING AIR SUPPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

PREPARATION FOR USE

STORAGE OF THE HOSES

After performing the REGULAR OPERATIONAL INSPECTION, verify that the RIT-PAK III portable air supply is complete and packed properly for use as follows:

Verify that all hoses and optional equipment are present and properly stored in their storage compartments as follows:

1. To store the HIGH pressure supply hose:
   a) Open the cover over the pressure reducer end of the bag (T-handle Cover) and fully extend the HIGH pressure hose.
   b) Make a bend in the hose where it comes out of the storage compartment and feed the bend backwards into the compartment.
   c) Continue feeding the hose into the compartment until only the high pressure RIC UAC connector is left showing with the back of the connector just inside the compartment. See FIGURE 18.

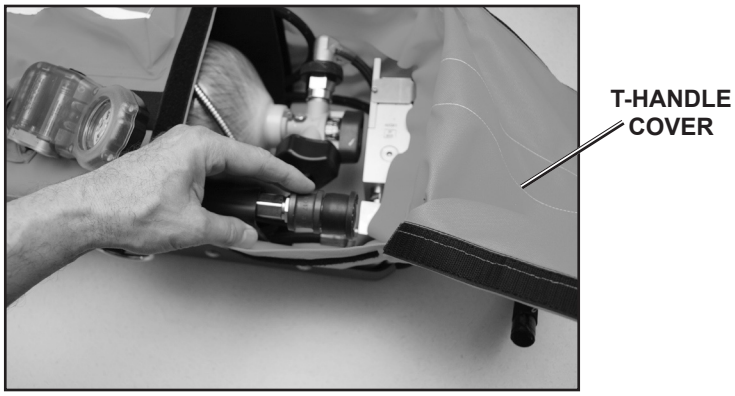


FIGURE 18

2. To store the LOW pressure supply hose:
   a) Open the cover over the accessory compartment (Ball-handle Cover) and fully extend the hose.
   b) Make a bend in the hose where it comes out of the storage compartment and feed the bend backwards into the compartment.
   c) Continue feeding the hose into the compartment until the dual manifold reaches the inside of the Ball-handle Cover.
   d) Secure the dual manifold to the inside of the Ball-handle Cover with the hook-and-loop strap as shown in FIGURE 19.

FIGURE 19

STORAGE OF THE OPTIONAL EMERGENCY FACEPIECE AND BREATHING REGULATOR

1. To store the optional Emergency facepiece and Emergency breathing regulator:
   a) Fit the head harness of the facepiece inside the facepiece.
   b) Coil the regulator hose around the regulator and fit inside the facepiece as shown in FIGURE 20.

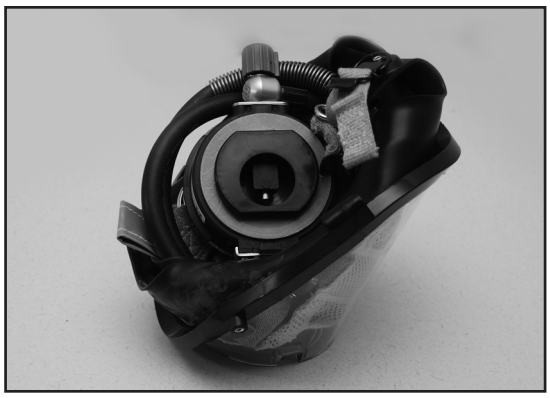


FIGURE 20

   c) Place the facepiece and regulator into the accessory storage compartment as shown in FIGURE 21.

FIGURE 21

2. To store the optional Emergency facepiece and Emergency breathing regulator ***connected*** to the LOW pressure supply hose:
   a) Prepare the facepiece and regulator as stated above.
   b) Connect the regulator male quick disconnect to the female quick disconnect on the dual manifold.
   c) Place the facepiece and regulator into the accessory storage compartment with the LOW pressure supply hose fitting across the notch in the accessory compartment as shown in FIGURE 22.

FIGURE 22

Proceed to the FINAL PREPARATION section of this instruction.

PREPARATION FOR USE
CONTINUED ON NEXT PAGE...

PREPARATION FOR USE CONTINUED...

FINAL PREPARATION

1. Verify that a full air supply cylinder is properly installed and attached to the pressure reducer. Refer to the AIR CYLINDER INSTALLATION section of this instruction.
2. Open the air supply cylinder and verify that the remote pressure gauge console and LED display lights are working properly.
3. Make sure that the hook-and-loop fasteners on all covers are securely sealed.
4. Verify that all straps are installed as needed. Various attachments are possible, but the following represent some typical uses:
   a) The long strap can be attached to each side to two alternate side rings to provide a shoulder strap. See FIGURE 23.

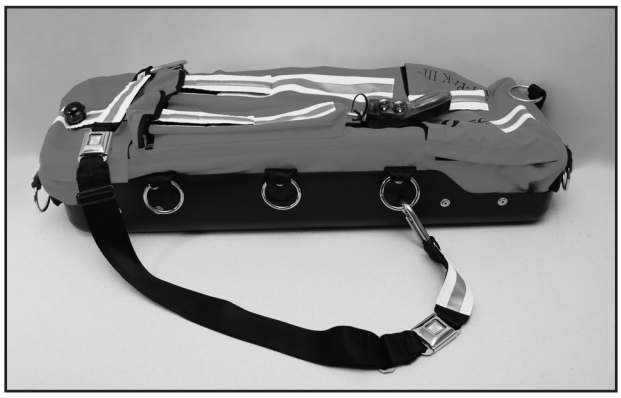


FIGURE 23

   b) The long strap can be also connected at each end to provide a shoulder strap. See FIGURE 24. If separated at the seat belt buckle, the long strap can be used as a single drag pull.

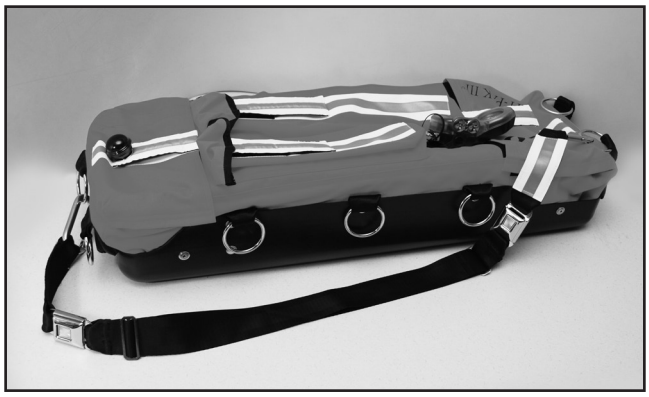


FIGURE 24

   c) The long strap can also be attached to two end rings to provide a loop drag pull. See FIGURE 25.

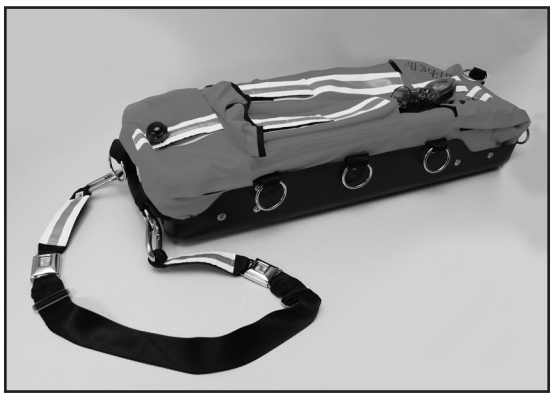


FIGURE 25

d) The optional two handle straps can attach to four side rings and attach together in the center with a hook-and-loop fastener to provide a single lift handle. See FIGURE 26.

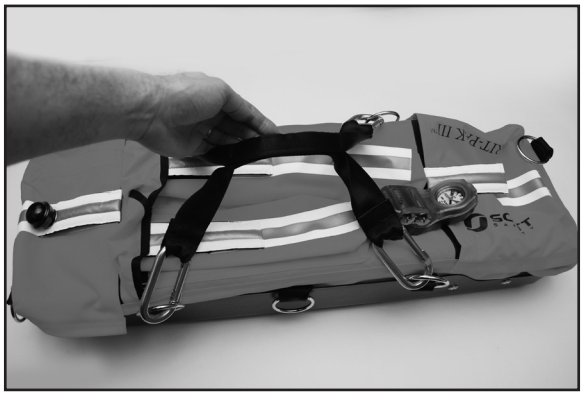


FIGURE 26

e) The optional two handles can be also attached one at each end for dragging or two man carry. See FIGURE 27.

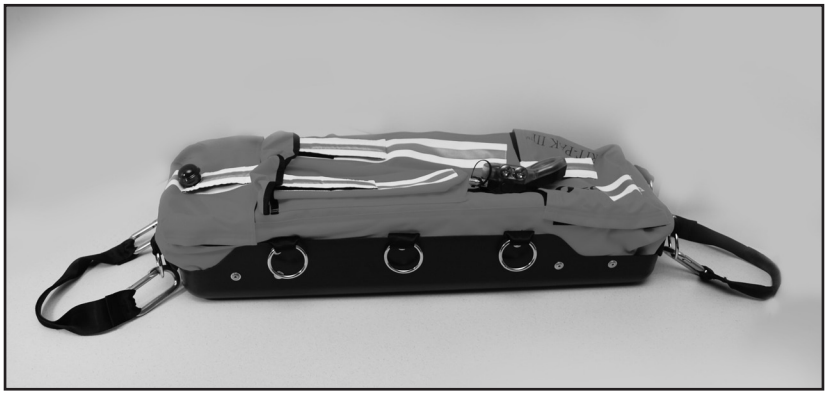


FIGURE 27

5. Proceed with use of the RIT-PAK III portable air supply in accordance with the guidelines of your emergency response and respiratory protection programs.

LOW PRESSURE AIR SUPPLY

LOW PRESSURE AIR SUPPLY USE

The members of the Rapid Intervention Team must be thoroughly trained and familiar with the identification and operation of each Low Pressure connection method and the appropriate application of each. Use care when handling the Low Pressure Air Supply Hose and Manifold.

Verify which SCOTT respirator options are in use in your respiratory protection program and how to connect the SCOTT RIT-PAK III portable air supply unit to the equipment in use by the program. The RIT-PAK III portable air supply may be configured with various low pressure quick disconnect couplings to accommodate different respirator applications. Understand how to identify and operate all couplings.

NOTE

THE END-OF-SERVICE ALARM ON THE RESPIRATOR MAY NOT OPERATE NORMALLY WHEN BEING SUPPLIED BY THE RIT-PAK III PORTABLE AIR SUPPLY. A MEMBER OF THE TEAM MUST MONITOR THE AIR SUPPLY FOR THE RESPIRATOR USER UNTIL THE RESCUE IS COMPLETE.

On SCOTT self-contained breathing apparatus (SCBA) respirators, connection to the LOW pressure air supply hose may be made to one of the following methods depending on how the respirator is configured:

- To the SCOTT facepiece mounted regulator if it is equipped with an in-line quick disconnect
- To the SCOTT Emergency Breathing Support System (EBSS or “Buddy Breather”)
- To the Extended Duration supplied air airline connection on the respirator.

Additional ports are provided on the LOW pressure air supply hose manifold for the installation of other quick disconnect fittings. Refer to the INSTALLATION OF ALTERNATE QUICK DISCONNECT COUPLINGS section of this instruction for details.

In addition, use of the optional Emergency facepiece and Emergency breathing regulator provides another method of supplying breathing air to the respirator user. Refer to the USE OF THE EMERGENCY FACEPIECE AND BREATHING REGULATOR section of this instruction.

Every emergency situation is unique. The users of this equipment must be fully trained to assess the situation and the risks involved and decide how best to use this equipment.

Special instruction and care is required for use of this equipment. When the system is pressurized, the Low Pressure hose can release compressed air at 160 psi. Compressed air pointed at unprotected skin may cause transmission of air into the blood stream causing air embolism and other tissue damage. Compressed air introduced into a body cavity may cause serious or fatal injury.

Always position the SCOTT RIT-PAK III portable air supply on a safe, flat, level surface where the unit or cylinder will not shift or slide. Avoid direct contact with fire or flame or other sources of heat.

Use care when handling the LOW pressure airline assembly to avoid snagging or tangling of the hoses and misuse or damage which could result in partial or complete loss of breathing air or the uncontrolled release of compressed air. Any damage to the hoses such as cuts or breakage, or damage to the pressure reducer assembly or quick disconnects may result in uncontrolled air loss from the respirator.

WARNING

USERS OF SCOTT RIT-PAK III PORTABLE AIR SUPPLY MUST BE SUPPLIED WITH AND FULLY TRAINED IN THE IDENTIFICATION, OPERATION, AND USE OF THE DIFFERENT LOW PRESSURE QUICK DISCONNECTS WHICH MAY BE ENCOUNTERED IN EMERGENCY SITUATIONS. FAILURE TO PROVIDE THE CORRECT EQUIPMENT AND TO FULLY TRAIN PERSONNEL IN THE USE OF THE EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

SCOTT RIT-PAK III PORTABLE AIR SUPPLY IS EQUIPPED WITH A BELL END-OF-SERVICE ALARM AS WELL AS THE LED DISPLAY TO SIGNIFY WHEN THE CYLINDER HAS ONLY ONE QUARTER OF ITS FULL CAPACITY REMAINING. THE END-OF-SERVICE ALARM ON THE USER’S RESPIRATOR MAY NOT OPERATE NORMALLY WHEN BEING SUPPLIED BY THE RIT-PAK III PORTABLE AIR SUPPLY. FAILURE TO ASSIGN A PROPERLY TRAINED PERSON TO MONITOR THE AIR GAUGE OF THE CYLINDER AND VALVE ASSEMBLY USED WITH THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY AND/OR FAILURE TO MAINTAIN EFFECTIVE COMMUNICATIONS WITH THE RESPIRATOR USER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

BASIC PRINCIPLES OF LOW PRESSURE AIR SUPPLY USAGE

1. Use only in accordance with your respiratory protection program. The SCOTT RIT-PAK III portable air supply is to be used only for aid in evacuating a respirator user from an area requiring respiratory protection.
2. Perform REGULAR OPERATIONAL INSPECTION procedure of the SCOTT RIT-PAK III portable air supply as described in these instructions.
3. Before connecting to respirator user, ensure that the SCOTT RIT-PAK III portable air supply is away from sources of heat or flame and secured on a safe, flat, level surface where the unit or cylinder will not shift or slide. Handle the air hose in a manner which will prevent a sudden or unexpected pull on the air hose from moving or damaging the SCOTT RIT-PAK III portable air supply.
4. Assign a trained person to monitor the air gauge on the RIT-PAK III portable air supply.
   a) The person monitoring the air gauge must be instructed to alert the Rapid Intervention Team when the air pressure has been reduced to a predetermined value. That predetermined value, for example, 1/4 Full (approximately 500 psi for a 2216 cylinder OR 1000 psi for a 4500 psi cylinder OR 1200 psi for a 5500 psi cylinder), must be set after considering all conditions of respirator use and in conformance with your organized respiratory protection program.
   b) Be certain the person assigned to monitor the pressure gauge of the air supply cylinder has an effective means of communicating with the Rapid Intervention Team. See the SERVICE LIFE section on page four of this instruction.
5. Verify that the respirator user's air supply cylinder is properly installed with the cylinder coupling connected to the cylinder to prevent any loss of breathing air when the SCOTT RIT-PAK III portable air supply is connected.
   a) If the respirator user's air supply cylinder is open, air will continue to be supplied from that cylinder until the supply pressure drops below the supply pressure from the Low Pressure airline assembly.
   b) If the respirator user's air supply cylinder is closed, the only source of breathing air will be from the SCOTT RIT-PAK III portable air supply.
6. Connect the air supply hose of the SCOTT RIT-PAK III portable air supply to the respirator being used by the individual being evacuated. Refer to the LOW PRESSURE AIRLINE CONNECTIONS section of this instruction for details of possible airline connections.
7. Refer to the LOW PRESSURE AIRLINE CONNECTION for details of when to open air supply cylinder valve of the SCOTT RIT-PAK III portable air supply. Valve must be fully open for proper use.
8. Secure the LOW pressure airline assembly to the respirator user's person, check that facepiece fit is secure, and transport in accordance with your organized respirator program.
9. If, during use of the respirator, breathing becomes difficult for the respirator user, the air supply stops or any other difficulty is encountered, identify and correct the problem immediately. If necessary, find another source of breathing air for the respirator user until the evacuation can be completed. Leave the area requiring respiratory protection as quickly as possible as prescribed by your organized respiratory protection program.

WARNING

COMPRESSED AIR IS HAZARDOUS. DO NOT USE THE COMPRESSED AIR FOR ANY PURPOSES OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS. CARELESS HANDLING OF COMPRESSED AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

FOLLOW THE REGULAR OPERATIONAL INSPECTION PROCEDURE EXACTLY. IF ANY DISCREPANCY IS NOTED, DO NOT USE THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY. FAILURE TO PERFORM THE REGULAR OPERATIONAL INSPECTION MAY PERMIT A MALFUNCTION THAT MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

SCOTT RIT-PAK III PORTABLE AIR SUPPLY IS EQUIPPED WITH A BELL END-OF-SERVICE ALARM AS WELL AS THE LED DISPLAY TO SIGNIFY WHEN THE CYLINDER HAS ONLY ONE QUARTER OF ITS FULL CAPACITY REMAINING. FAILURE TO ASSIGN A PROPERLY TRAINED PERSON TO MONITOR THE AIR GAUGE OF THE CYLINDER AND VALVE ASSEMBLY USED WITH THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY AND/OR FAILURE TO MAINTAIN EFFECTIVE COMMUNICATIONS WITH THE RESPIRATOR USER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

WARNING

WHEN SUPPLYING AIR TO A RESPIRATOR USER WITH THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY, VERIFY THAT THE RESPIRATOR USER'S AIR SUPPLY CYLINDER IS PROPERLY INSTALLED AND CONNECTED TO THE RESPIRATOR CYLINDER COUPLING. FAILURE TO VERIFY THIS CONNECTION MAY RESULT IN LOSS OF BREATHING AIR FROM THE RIT-PAK III PORTABLE AIR SUPPLY, THE USER'S RESPIRATOR OR BOTH WHICH MAY RESULT IN UNEXPECTED LOSS OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

LOW PRESSURE AIR SUPPLY USE

CONTINUED ON NEXT PAGE...

LOW PRESSURE AIR SUPPLY USE CONTINUED...

LOW PRESSURE AIRLINE CONNECTIONS

NOTE

THE FOLLOWING CONNECTIONS REQUIRE THAT THE CYLINDER VALVE BE **FULLY OPENED BEFORE** CONNECTING TO THE USER'S RESPIRATOR.

CONNECTING TO QUICK DISCONNECT COUPLING ON FACEPIECE MOUNTED REGULATOR OF AN AIR-PAK SCBA:

1. Fully open the air supply cylinder valve of the SCOTT RIT-PAK III portable air supply.
2. Operate the quick disconnect to release the hose to the user's facepiece mounted regulator. For most SCOTT AIR-PAK respirators, operation will be the Pull-back Sleeve Coupling described above. See FIGURE 13. Some older units may use the Notched Sleeve Coupling which requires the alignment of the notch in the sleeve with the rivet head to permit release of the sleeve.
3. Connect the hose from the user's facepiece mounted regulator to the female Pull-back Sleeve quick disconnect on the Manifold Assembly.
4. Test for proper engagement by tugging on the coupling.
5. Secure the Low pressure dual manifold assembly to the respirator user's person to prevent pulling on the facepiece while transporting.

WARNING

THE CYLINDER VALVE MUST BE FULLY OPENED FOR PROPER OPERATION OF THE RESPIRATOR. IF CYLINDER VALVE IS NOT FULLY OPENED, THE RESPIRATOR MAY NOT OPERATE PROPERLY RESULTING IN POSSIBLE INJURY OR DEATH.

WARNING

FAILURE TO CHECK ENGAGEMENT OF THE COUPLING AS DESCRIBED MAY LEAD TO HOSE SEPARATION AND LOSS OF BREATHING AIR RESULTING IN SERIOUS INJURY OR DEATH.

CONNECTING TO THE SUPPLIED AIR AIRLINE HOSE ON THE USER'S RESPIRATOR:

1. Fully open the air supply cylinder valve of the SCOTT RIT-PAK III portable air supply.
2. Disconnect the supplied air airline from the airline connection hose on the user's respirator.
3. Connect the airline connection hose on the user's respirator to the proper mating quick disconnect on the Manifold Assembly. (Configuration may vary by organization. Be sure you know which style quick disconnects are being used for supplied air airline hoses. Refer to the INSTALLATION OF ALTERNATE QUICK DISCONNECT COUPLINGS section of this instruction.)
4. Test for proper engagement by tugging on the coupling.
5. Secure the Low pressure dual manifold assembly to the respirator user's person while transporting.

WARNING

USERS OF SCOTT RIT-PAK III PORTABLE AIR SUPPLY MUST BE SUPPLIED WITH AND FULLY TRAINED IN THE IDENTIFICATION, OPERATION, AND USE OF THE DIFFERENT LOW PRESSURE QUICK DISCONNECTS WHICH MAY BE ENCOUNTERED IN EMERGENCY SITUATIONS. FAILURE TO PROVIDE THE CORRECT EQUIPMENT AND TO FULLY TRAIN PERSONNEL IN THE USE OF THE EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

CONNECTING TO THE EBSS (BUDDY BREATHER) HOSE ON AN AIR-PAK SCBA:

1. Two kinds of EBSS (BUDDY BREATHER) Hose may be encountered:
   - a single female quick disconnect

   OR
   - a dual male/female quick disconnect
2. If the EBSS on the respirator user's SCBA is a single female quick disconnect, attach the male quick disconnect coupling on the RIT-PAK III portable air supply low pressure dual manifold to the EBSS hose on the respirator user's AIR-PAK. The female coupling on the EBSS hose may be either the Pull-back Sleeve or the Notched Sleeve type of coupling. After connection to EBSS hose coupling with the Notched Sleeve coupling, make sure the sleeve is rotated 1/4 to 1/2 turn so notch does not line up with rivet head. Test for proper engagement by tugging on the couplings.
3. If the EBSS on the respirator user's SCBA is a dual male/female quick disconnect, attach the male quick disconnect coupling on the RIT-PAK III portable air supply low pressure dual manifold to the female coupling on the dual EBSS hose on the respirator user's AIR-PAK. The female coupling will be the Pull-back Sleeve type of coupling. Test for proper engagement by tugging on the couplings.
4. Secure the Low pressure dual manifold assembly to the respirator user's person while transporting.

LOW PRESSURE AIR SUPPLY USE CONTINUED ON NEXT PAGE...

LOW PRESSURE AIR SUPPLY USE CONTINUED...

USE OF THE EMERGENCY BREATHING REGULATOR

Depending on the circumstances of the rescue, it may be necessary either to provide air to the respirator user with the Emergency breathing regulator on the respirator user's SCOTT facepiece, or to provide air to the user with the optional Emergency facepiece and Emergency breathing regulator together. Refer to the following guidelines:

1. User of the Emergency breathing regulator is indicated when:
   a) The respirator user is using a compatible SCOTT respirator with a full facepiece but the respirator does not have any quick disconnects suitable for attachment of the RIT-PAK III portable air supply LOW or HIGH pressure air supply hoses.
   b) The respirator user is using a compatible SCOTT respirator with a full facepiece but the facepiece mounted regulator is clearly damaged or not functioning.
   c) The respirator user is using a compatible SCOTT respirator with a full facepiece and the fastest way to provide breathing air is to replace the user's breathing regulator with the Emergency breathing regulator.

NOTE

THE EMERGENCY BREATHING REGULATOR ***DOES NOT*** HAVE AN END-OF-SERVICE TIME INDICATOR AND IS INTENDED ONLY FOR EMERGENCY USE ON EITHER THE OPTIONAL EMERGENCY FACEPIECE OR ON COMPATIBLE SCOTT FULL FACEPIECES AS PART OF THE RIT-PAK III PORTABLE AIR SUPPLY.

2. Fully open the cylinder valve by rotating the knob counter clockwise (approximately two-and-one-half turns).
3. Fully extend the LOW pressure air supply hose from the storage compartment in the RIT-PAK III portable air supply.
4. Connect the male quick disconnect of the Emergency breathing regulator to the female quick disconnect on the low pressure manifold. Verify that the connection is secure by tugging on the connectors.
5. Briefly open and close the purge valve to confirm the flow of breathing air to the regulator. If air is flowing freely from the regulator with the purge valve closed, DEPRESS the air saver switch to stop the air flow.
6. Remove the respirator user's breathing regulator from the facepiece by pulling back on the regulator retaining latch and rotating the regulator 1/4 turn.
7. Immediately install the Emergency breathing regulator on the user's facepiece. Align the two flats of the regulator outlet port with the corresponding flats in the facepiece port (the red purge valve will be in the 12 o'clock position). Insert the regulator into the facepiece port and rotate until the retaining latch lock tab snaps into the facepiece.
8. If the user's breathing is not strong enough to release the air saver switch and begin demand breathing, fully open the purge valve to supply air to the user.
9. Secure the LOW pressure air supply hose to the respirator user's person while transporting.

USE OF THE EMERGENCY FACEPIECE AND BREATHING REGULATOR TOGETHER

1. User of the EMERGENCY facepiece and Emergency breathing regulator together is indicated when:
   a) The respirator user is using a respirator but it is NOT a compatible SCOTT respirator and the respirator does not have any quick disconnects suitable for attachment of the RIT-PAK III portable air supply LOW or HIGH pressure air supply hoses.
   b) The respirator user is using a compatible SCOTT respirator with a full facepiece but the facepiece and/or the facepiece mounted regulator are clearly damaged or not functioning.
   c) The individual to be rescued is NOT using a respirator at all.
2. Fully open the cylinder valve by rotating the knob counter clockwise (approximately two-and-one-half turns).
3. Fully extend the LOW pressure air supply hose from the storage compartment in the RIT-PAK III portable air supply.
4. Connect the male quick disconnect of the Emergency breathing regulator to the female quick disconnect on the low pressure manifold. Verify that the connection is secure by tugging on the connectors.
5. Briefly open and close the purge valve to confirm the flow of breathing air to the regulator. If air is flowing freely from the regulator, depress the air saver switch to stop the air flow.
6. Install the Emergency breathing regulator on the Emergency facepiece. Align the two flats of the regulator outlet port with the corresponding flats in the facepiece port (the red purge valve will be in the 12 o'clock position. Insert the regulator into the facepiece port and rotate until the retaining latch lock tab snaps into the facepiece.

NOTE

THE EMERGENCY BREATHING REGULATOR ***DOES NOT*** HAVE AN END-OF-SERVICE TIME INDICATOR AND IS INTENDED ONLY FOR EMERGENCY USE ON EITHER THE OPTIONAL EMERGENCY FACEPIECE OR ON COMPATIBLE SCOTT FULL FACEPIECES AS PART OF THE RIT-PAK III PORTABLE AIR SUPPLY.

7. Remove any head gear or other respirator facepiece from the person to be rescued that would interfere with the donning of the Emergency facepiece.
8. To place the Emergency facepiece on the person to be rescued:
   a) Fully extend the head harness straps.
   b) Place the facepiece on the face with the chin properly located in the chin pocket while pulling the head harness over the top of the head. Verify that no hair or clothing is interfering with the face to facepiece seal.
   c) Hold the facepiece in place and tighten the neck straps by pulling the two lower strap ends toward the rear of the head. Large metal rings on the lower strap ends are provided to facilitate pulling.
   d) Hold the facepiece in place and verify that the head harness is lying flat against the back of the head. Tighten the two temple straps.
   e) Tighten the top center strap and retighten the two neck straps.
8. If the user's breathing is not strong enough to release the air saver switch and begin demand breathing, fully open the purge valve to supply air to the user.
9. Secure the LOW pressure air supply hose to the respirator user's person while transporting.

HIGH PRESSURE AIR SUPPLY

HIGH PRESSURE AIR SUPPLY USE

The HIGH pressure air supply hose is a component feature of the RIT-PAK III portable air supply. The HIGH pressure air supply hose is fitted with a RIC UAC coupling is designed to connect with SCBA respirators in compliance with NFPA 1981 (edition 2002 and later) which are fitted with a Rapid Intervention Crew/ Company Universal Air Connection (RIC UAC) System. This system permits emergency replenishment of an approved SCBA breathing air supply cylinder from an air supply source while in use. The RIT-PAK III portable air supply HIGH pressure air supply hose supplies the full pressure of the installed cylinder and valve assembly to a quick disconnect fitting compatible with all RIC UAC couplings. This attachment must not be used for any unapproved use. Handle the High Pressure RIC UAC Airline with care.

Every emergency situation is unique. The users of this equipment must be fully trained to assess the situation and the risks involved and decide how best to use this equipment.

Special instruction and care is required for use of this equipment. Compressed air pointed at unprotected skin may cause transmission of air into the blood stream causing air embolism and other tissue damage. Compressed air introduced into a body cavity may cause serious or fatal injury.

Always position the SCOTT RIT-PAK III portable air supply on a safe, flat, level surface where the unit or cylinder will not shift or slide. Avoid direct contact with fire or flame or other sources of heat.

Use care when handling the HIGH pressure air supply hose to avoid snagging or tangling of the hoses and misuse or damage which could result in partial or complete loss of breathing air or the uncontrolled release of compressed air. Any damage to the hoses such as cuts or breakage, or damage to the pressure reducer assembly or quick disconnects may result in uncontrolled air loss from the respirator.

WARNING

THE RIC UAC SYSTEM IS FOR EMERGENCY USE ONLY. IMPROPER USE OF THIS SYSTEM MAY LEAD TO A MALFUNCTION OF THE EQUIPMENT WHICH COULD CAUSE SERIOUS INJURY OR DEATH. DO NOT USE THE SCOTT RIC UAC ASSEMBLY TO CHARGE AN SCBA AIR CYLINDER WHILE THE SCBA IS BEING WORN UNLESS THERE IS A COMPELLING REASON TO ASSUME THE RISK OF INJURY IF THERE IS A COMPONENT FAILURE DURING THE FILL PROCESS. A COMPONENT FAILURE DURING OR AFTER THE FILL PROCESS MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

COMPRESSED AIR IS HAZARDOUS. USE CARE WHEN HANDLING THE HIGH PRESSURE SUPPLY HOSE. WHEN THE SYSTEM IS PRESSURIZED, THE HIGH PRESSURE HOSE CAN EMIT 4500 PSI OF COMPRESSED AIR IF THE HOSE BECOMES CUT OR DAMAGED. DO NOT USE THE COMPRESSED AIR FOR ANY PURPOSES OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS. CARELESS HANDLING OF COMPRESSED AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

The RIC UAC is for **emergency use only** when the respirator user is incapacitated within the hazardous atmosphere and be used only for aid in evacuating the respirator user. Use only in accordance with your respiratory protection program.

The RIC UAC manifold on the SCBA is equipped with a relief valve which will open if the supply pressure of the emergency air supply exceeds the maximum pressure rating of the complete respirator. See FIGURE 28. If the relief valve is venting, avoid contact with unprotected skin.

Before use, perform the REGULAR OPERATIONAL INSPECTION procedure of the SCOTT RIT-PAK III portable air supply as outlined in this manual.

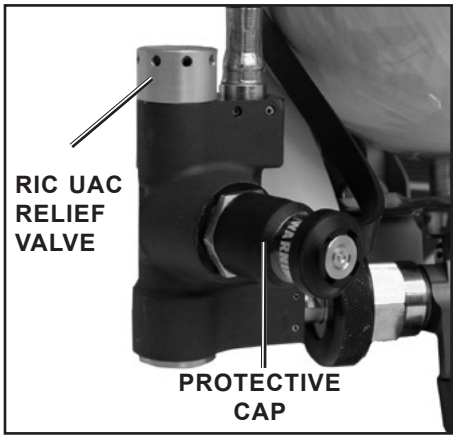


FIGURE 28

WARNING

USERS OF SCOTT RIT-PAK III PORTABLE AIR SUPPLY MUST BE SUPPLIED WITH AND FULLY TRAINED IN THE IDENTIFICATION, OPERATION, AND USE OF THE DIFFERENT HIGH PRESSURE COUPLINGS WHICH MAY BE ENCOUNTERED IN EMERGENCY SITUATIONS. FAILURE TO PROVIDE THE CORRECT EQUIPMENT AND TO FULLY TRAIN PERSONNEL IN THE USE OF THE EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

COMPRESSED AIR IS HAZARDOUS. IF THE RELIEF VALVE ON THE RIC UAC ASSEMBLY IS VENTING, AVOID CONTACT WITH UNPROTECTED SKIN. CARELESS HANDLING OF COMPRESSED AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

To use the RIT-PAK III portable air supply with a RIC UAC system, proceed as follows:

1. To prevent a loss of air from the cylinder when the valve is opened, verify that nothing is installed on the LOW pressure air supply hose that would deplete the air supply when the cylinder valve is open. (See the LOW PRESSURE AIR SUPPLY USAGE section of this instruction).
2. Fully **open** the cylinder valve on the SCOTT RIT-PAK III portable air supply.
3. Before connecting to respirator user, ensure that SCOTT RIT-PAK III portable air supply is secured on a flat, level surface where the unit will not shift or slide. Avoid direct contact with fire or flame or other sources of heat.
4 Handle the HIGH pressure air supply hose in a manner which will prevent a sudden or unexpected pull from moving or damaging the SCOTT RIT-PAK III portable air supply.
5. Identify the RIC UAC coupling on the respirator user's SCBA and remove the protective cap from the RIC UAC coupling. If the RIC UAC coupling on the respirator appears damaged, do not attempt to connect the RIC UAC airline assembly to the respirator. Find an alternate method of supplying air to the respirator user.
6. A member of the Rapid Intervention Crew/Company must visually inspect the user's respirator before proceeding with recharging. Inspect the user's cylinder for dents or gouges in the metal or fiber wrapping and inspect the cylinder valve for signs of damage. If the cylinder and valve assembly shows damage or evidence of exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, gauge lens melted or elastomeric bumper distorted, the decision must be made whether the cylinder is suitable for recharging by this method. Also inspect the user's respirator for other damage to hoses or components that might result in a failure when high pressure air is introduced into the system. If there is any suspicion that the cylinder or the respirator is not safe, find another method of supplying air to the respirator user.
7. Determine the maximum capacity of the user's respirator cylinder and check the cylinder gauge on the respirator cylinder to determine how much air is left in the cylinder. NEVER CHARGE A CYLINDER TO MORE THAN THE RATED PRESSURE MARKED ON THE CYLINDER.
8. Verify that the respirator user's air supply cylinder is properly installed with the cylinder coupling connected to the cylinder to prevent any loss of breathing air when the SCOTT RIT-PAK III portable air supply is connected.
9. Verify that the cylinder valve on the respirator is fully open by turning the cylinder valve knob fully counterclockwise (approximately 2 1/2 full turns).
10. Remove the dust cap coupling on the HIGH pressure air supply hose. Visually inspect the coupling for dirt or damage. Remove any dirt or contamination from the coupling.
11. Connect the HIGH pressure airline hose by pushing the quick disconnect coupling on the hose assembly on to the RIC UAC coupling on the respirator until the quick disconnect sleeve "clicks" into place. Check the engagement by tugging on the coupling. See FIGURE 29.

CONNECTING THE RIC UAC

FIGURE 29

WARNING

IF THE SCBA OR THE CYLINDER TO BE CHARGED IS KNOWN OR SUSPECTED OF HAVING BEEN DROPPED, EXPOSED TO DIRECT FLAME IMPINGEMENT OR DAMAGED IN ANY WAY, DO NOT USE THE RIC UAC SYSTEM. FIND ANOTHER METHOD OF SUPPLYING BREATHING AIR TO THE RESPIRATOR USER. ATTEMPTING TO FILL A CYLINDER WHICH IS KNOWN OR SUSPECTED OF DAMAGE IN ANY WAY MAY RESULT IN CYLINDER FAILURE WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

WARNING

WHEN SUPPLYING AIR TO A RESPIRATOR USER WITH THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY, VERIFY THAT THE RESPIRATOR USER'S AIR SUPPLY CYLINDER IS PROPERLY INSTALLED AND CONNECTED TO THE RESPIRATOR CYLINDER COUPLING. FAILURE TO VERIFY THIS CONNECTION MAY RESULT IN LOSS OF BREATHING AIR FROM THE RIT-PAK III PORTABLE AIR SUPPLY, THE USER'S RESPIRATOR OR BOTH WHICH MAY RESULT IN UNEXPECTED LOSS OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

WARNING

FAILURE TO CHECK ENGAGEMENT OF THE COUPLING AS DESCRIBED MAY LEAD TO HOSE SEPARATION AND LOSS OF BREATHING AIR RESULTING IN SERIOUS INJURY OR DEATH.

HIGH PRESSURE AIR SUPPLY USE CONTINUED ON NEXT PAGE...

HIGH PRESSURE AIR SUPPLY CONTINUED...

a) If the air pressure in the RIT-PAK III portable air supply cylinder is higher than the air pressure in the respirator cylinder, air will immediately begin to flow from the portable air supply cylinder to the respirator cylinder. The remote gauge on the respirator will begin to show an increase in pressure.

NOTE

THE RIC UAC MANIFOLD IS FITTED WITH A RELIEF VALVE TO VENT AIR IF THE RATED PRESSURE OF THE RESPIRATOR IS EXCEEDED. IF THIS OCCURS, CLOSE THE CYLINDER VALVE ON THE RIT-PAK III PORTABLE AIR SUPPLY AND CHECK THE PRESSURE ON THE RESPIRATOR CYLINDER GAUGE. WHEN THE EXCESS PRESSURE HAS VENTED, THE RELIEF VALVE WILL RESET.

NOTE

IF AT ANY TIME DURING THE FILLING PROCESS A LEAK IS DETECTED, IMMEDIATELY DISCONTINUE THE FILLING PROCEDURE AND FIND ANOTHER METHOD OF SUPPLYING AIR TO THE RESPIRATOR USER.

b). The air will stop flowing when the respirator SCBA cylinder and the SCOTT RIT-PAK III air supply reach the same pressure. The remote pressure gauge on the SCBA respirator will stabilize at a reading less than “full” at this time. There may still be air in the SCOTT RIT-PAK III portable air supply cylinder. Close the cylinder valve on the SCOTT RIT-PAK III portable air supply.

NOTE

WHEN THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY IS USED WITH THE HIGH PRESSURE AIR SUPPLY HOSE TO RECHARGE A DEPLETED CYLINDER, YOU WILL NOT OBTAIN EITHER CYLINDER’S RATED DURATION AFTER THE TRANSFER. THE AMOUNT OF AIR TRANSFERRED TO THE CYLINDER BEING CHARGED IS DEPENDENT ON THE SIZE OF THE CYLINDER AND THE AMOUNT OF AIR LEFT IN THE CYLINDER BEING CHARGED AND WILL ALWAYS BE LESS THAN EITHER CYLINDER RATING. SEE THE SERVICE LIFE SECTION ON PAGE FOUR OF THIS INSTRUCTION.

12. When charging is complete, disconnect the HIGH pressure air supply hose from the RIC UAC coupling on the respirator by pulling the coupling sleeve away from the respirator until the coupling disengages. A check valve in the RIC UAC coupling on the respirator will prevent air from flowing out of the SCBA cylinder.

AFTER CHARGING THE USER’S BREATHING AIR CYLINDER

1. After charging is complete, monitor the cylinder pressure on the respirator user’s cylinder gauge. If the user’s SCBA cylinder becomes depleted before evacuation is complete, repeat the charging process with a RIT-PAK III portable air supply equipped with a full cylinder.

NOTE

THE END-OF-SERVICE ALARM ON THE RESPIRATOR MAY NOT OPERATE NORMALLY WHEN BEING SUPPLIED BY THE RIT-PAK III PORTABLE AIR SUPPLY. A MEMBER OF THE TEAM MUST MONITOR THE AIR SUPPLY FOR THE RESPIRATOR USER UNTIL THE RESCUE IS COMPLETE.

2. Leave the area requiring respiratory protection as quickly as possible as prescribed by your organized respiratory protection program. If, during use of the respirator, breathing becomes difficult for the respirator user, the air supply stops or any other difficulty is encountered, identify and correct the problem immediately. If necessary, find another source of breathing air for the respirator user until the evacuation can be completed.

WARNING

NEVER CHARGE A CYLINDER TO MORE THAN THE RATED PRESSURE MARKED ON THE CYLINDER. OVERCHARGING A CYLINDER MAY CAUSE A FAILURE RESULTING IN RAPID RELEASE OF HIGH PRESSURE AIR WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

CAUTION

OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.

WARNING

IF AT ANY TIME DURING THE FILLING PROCESS A LEAK IS DETECTED, IMMEDIATELY DISCONTINUE THE FILLING PROCEDURE AND FIND ANOTHER METHOD OF SUPPLYING AIR TO THE RESPIRATOR USER. CONTINUING TO FILL A RESPIRATOR THAT HAS EXHIBITED A LEAK MAY CAUSE A FAILURE OF THE EQUIPMENT WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

YOU WILL NOT OBTAIN EITHER CYLINDER’S RATED DURATION AFTER TRANSFER WITH THE RIC UAC AIRLINE ASSEMBLY. THE AMOUNT OF AIR TRANSFERRED WILL ALWAYS BE LESS THAN EITHER CYLINDER RATING. FAILURE TO MONITOR THE AIR GAUGE OF THE RESPIRATOR CYLINDER AND VALVE ASSEMBLY AND/OR FAILURE TO MAINTAIN EFFECTIVE COMMUNICATIONS WITH THE RESPIRATOR USER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

WARNING

SCOTT RIT-PAK III PORTABLE AIR SUPPLY IS EQUIPPED WITH A BELL END-OF-SERVICE ALARM AS WELL AS THE LED DISPLAY TO SIGNIFY WHEN THE CYLINDER HAS ONLY ONE QUARTER OF ITS FULL CAPACITY REMAINING. THE END-OF-SERVICE ALARM ON THE USER’S RESPIRATOR MAY NOT OPERATE NORMALLY WHEN BEING SUPPLIED BY THE RIT-PAK III PORTABLE AIR SUPPLY. FAILURE TO ASSIGN A PROPERLY TRAINED PERSON TO MONITOR THE AIR GAUGE OF THE CYLINDER AND VALVE ASSEMBLY USED WITH THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY AND/OR FAILURE TO MAINTAIN EFFECTIVE COMMUNICATIONS WITH THE RESPIRATOR USER MAY RESULT IN SUDDEN AND UNEXPECTED TERMINATION OF THE AIR SUPPLY TO THE USER OF THE RESPIRATOR AND LEAD TO SERIOUS INJURY OR DEATH.

AFTER THE EVACUATION IS COMPLETE

1. Verify that the HIGH pressure hose coupling is clean and reinstall the dust cap on the HIGH pressure air supply hose coupling.
2. Immediately replace the cylinder on the RIT-PAK III portable air supply with a full cylinder. Always provide a full cylinder for the SCOTT RIT-PAK III portable air supply rather than use the cylinder from a previous use, to ensure the maximum transfer of air to the respirator user's SCBA. See AIR CYLINDER REPLACEMENT section of this instruction.

NOTE

IF USING THE HIGH PRESSURE AIR SUPPLY HOSE IN COLD AMBIENT CONDITIONS, I.E. TEMPERATURES BELOW FREEZING, SEE THE **USE OF THE RIT-PAK III PORTABLE AIR SUPPLY IN LOW TEMPERATURE** SECTION OF THIS INSTRUCTION.

WARNING

IF THE SCOTT RIT-PAK III PORTABLE AIR SUPPLY DOES NOT PERFORM AS DESCRIBED IN THESE INSTRUCTIONS, REMOVE THE UNIT FROM SERVICE AND TAG FOR REPAIR BY AUTHORIZED PERSONNEL. USE OF IMPROPERLY OPERATING EQUIPMENT MAY RESULT IN FAILURE OF THE EQUIPMENT WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

USE OF THE RIT-PAK III PORTABLE AIR SUPPLY IN LOW TEMPERATURES

USE OF THE HIGH PRESSURE AIR SUPPLY HOSE IN LOW TEMPERATURES

Keep the HIGH pressure air supply hose coupling and the RIC UAC coupling dry at all times. Water on either coupling may freeze preventing connection to the RIC UAC coupling on the respirator or preventing removal of the HIGH pressure air supply hose once connected.

If the HIGH pressure air supply hose is used to fill a respirator cylinder in temperatures less than 32° F /0° C and the full respirator is then moved indoors to warmer temperatures, the pressure in the cylinder **MUST BE CHECKED FOR EXCESS PRESSURE** within two hours after the respirator is moved indoors. Warmer ambient temperatures will cause the pressure of the air in the cylinder to increase. If the pressure gauge on the cylinder is reading above "full," excess pressure must be removed from the cylinders by releasing air from the respirator with the regulator purge valve until the pointer of the gauge is reading "full."

USE OF THE LOW PRESSURE AIR SUPPLY IN LOW TEMPERATURES

Keep the LOW pressure air supply hose couplings dry at all times. Water on either connector may freeze preventing connection to the coupling on the respirator or preventing removal of the LOW pressure air supply hose once connected.

Keep the pressure reducer assembly dry at all times. During operation when air is passing through it, the reducer will naturally get cold. Water, mud, or wet debris on the reducer may freeze and may interfere with the operation of the air supply.

TERMINATION OF USE

Transport the respirator user to an area where respiratory protection is no longer needed. If the respirator user is breathing from the air supplied by the RIT-PAK III portable air supply, determine when it is safe to remove the respirator support from the user and proceed with other care of the respirator user as needed.

If reuse of the RIT-PAK III portable air supply may be required immediately:

1. Close the cylinder valve and vent the residual air from the system to allow the electronics to shut down and preserve battery life. Vent the system one of two ways:
   a) On the HIGH pressure air supply hose, press the VENT button in the center of the dust cover on the high pressure coupling,
   b) If a breathing regulator is attached to the LOW pressure air supply hose, open the purge valve on the breathing regulator to vent.
2. Check the equipment for any damage that may have occurred while the RIT-PAK III portable air supply was in use. If any damage is found that may be critical to the operation of the unit, remove the unit from service and tag for repair by authorized personnel.
3. Return the air supply hoses and optional Emergency facepiece and Emergency breathing regulator to their proper storage locations in the bag.
4. Replace the breathing air cylinder with a full cylinder.
5. Make sure all covers are securely sealed and that all straps are properly attached.

If use of the RIT-PAK III portable air supply is no longer needed:

1. Perform the tasks listed above.
2. Refer to the MAINTENANCE section of this instruction for cleaning instructions.
3. Perform a complete REGULAR OPERATIONAL INSPECTION before returning the unit to service.
4. Carefully follow the instructions for storage of each of the air supply lines and the optional Emergency facepiece and Emergency breathing regulator to assure that they can be properly deployed when they are needed.

CAUTION

OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.

MAINTENANCE

No attempt shall be made to replace components or to make adjustments or repairs beyond the scope of this instruction manual without proper training.
Clean and inspect the respirator after each use as follows:

1. Decontaminate unit as required.
2. Damp sponge dirt accumulations from the rest of the equipment.
3. Inspect the equipment for damage to the bag or carrier, worn or aging hoses or fittings, worn or frayed harness webbing or other damaged components.
4. Visually inspect cylinder and valve assembly for physical damage such as dents or gouges in metal or in composite wrapping. Cylinders which show physical damage or exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, pressure gauge lens melted or elastomeric bumper distorted, and cylinders which show evidence of exposure to chemicals such as discoloration, cracks in the cylinder or the composite wrapping, peeling of the outer layers of the composite wrapping and/or bulging of the cylinder wall, shall be removed from service and emptied of compressed air. Refer to current applicable publications on compressed gas cylinder inspection available from Compressed Gas Association Inc., 1725 Jefferson Davis Hwy., Suite 1004, Arlington, VA 22202, (703-412-0900) for a detailed explanation of cylinder inspection procedures.
5. Inspect the cylinder valve outlet threads and the coupling gasket. The gasket is located on the nipple coupling that connects the pressure reducer to the cylinder valve. To expose the threads and the gasket for inspection, grasp the hand wheel coupling on the pressure reducer and turn the hand wheel counterclockwise until the pressure reducer separates from the cylinder valve. Inspect the cylinder valve outlet for bent or damaged threads. If there is any damage to the cylinder valve outlet, the coupling, or the coupling gasket, remove the assembly from service and tag for repair by authorized personnel. If the gasket is present and in good condition and the valve outlet is undamaged, thread the coupling back onto the cylinder valve using hand tight pressure.
6. Check for leaks or loose fitting pipes or hoses. If any leakage is detected, remove unit from service and tag for repair by authorized personnel.

If any repairs are required, use only SCOTT parts for repair. Contact your authorized SCOTT distributor, or contact SCOTT at 1-800-247-7257 (or 704-291-8300 outside the continental United States). DO NOT SUBSTITUTE PARTS.

CARE OF THE RIT-PAK III CARRYING BAG

After use of the RIT-PAK III portable air supply, inspect the carrying bag for any damage from wear or from heat or flame. If any damage is found, remove the bag from service and tag for repair by authorized personnel.
Clean the interior and exterior of the carrying bag as needed. Thoroughly dry before storage. After inspection and testing, carefully follow the instructions for storage of each of the air supply lines and the optional Emergency facepiece and Emergency breathing regulator to assure that they can be properly deployed when they are needed.

CAUTION

DO NOT STORE EMPTY CYLINDERS WITH CYLINDER VALVE OPEN. AN OPEN VALVE MAY ALLOW MOISTURE OR OTHER CONTAMINANTS TO ENTER THE CYLINDER.

WARNING

ALWAYS VERIFY THAT THE UNIT IS THOROUGHLY CLEANED AND DECONTAMINATED PRIOR TO EACH USE. FAILURE TO CLEAN AND DECONTAMINATE THE EQUIPMENT BEFORE USE MAY EXPOSE THE USERS TO CONTAMINANTS THAT COULD CAUSE SERIOUS INJURY OR DEATH.

INSTALLATION OF ALTERNATE QUICK DISCONNECT COUPLINGS

The Low Pressure manifold comes equipped with both male (checked) and female quick disconnect couplings suitable for connecting to most SCOTT AIR-PAK SCBA respirator products. The manifold has two additional plugged ports that may be used for installation of alternate quick disconnect couplings. Use ONLY self-checked couplings. SCOTT offers the following female self-checked couplings:

- P/N 6831-00 Suitable for connecting to Schrader[3] male quick disconnects
- P/N 19458-00 Suitable for connecting to Hansen[4] male quick disconnects

Both couplings have 1/4" NPT male threads. Install a coupling as follows:

1. Decontaminate unit as required.
2. Place the RIT-PAK III portable air supply onto a large clean work surface.
3. Close the cylinder valve by pushing in and turning the hand wheel fully clockwise.
4. Purge the residual air pressure from the system.
5. Remove the cylinder from the carrying bag and set aside.
6. Use a 1/4" hex wrench to remove a plug from the Low Pressure manifold body.
7. Clean the internal threaded area to remove all traces of sealant used to retain the plug in place. Do not permit any debris into the air path. See FIGURE 30.

FIGURE 30

8. Wrap the male threads of the coupling with one layer of .0035" thick PTFE thread sealant tape. Wind the tape onto the threads clockwise (as seen from the end of the threads) beginning at the first thread. DO NOT ALLOW TAPE TO EXTEND BELOW THE FIRST THREAD. See FIGURE 31.

FIGURE 31

9. Thread the coupling into the open port in the manifold. Tighten to a torque of 180 inch-lbs.

After completion of the installation, perform a REGULAR OPERATIONAL INSPECTION to verify that there are no leaks in the assembly. See page 7 for an illustration of the complete assembly

WARNING

THE WORK AREA AND RESPIRATOR MUST BE CLEAN BEFORE PERFORMING THIS PROCEDURE. DO NOT PERMIT DIRT OR FOREIGN MATTER INTO THE AIR FLOW PATH. DIRT OR FOREIGN MATTER IN THE RESPIRATOR AIR PATH MAY CAUSE A MALFUNCTION OF THE RESPIRATOR WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

CAUTION

OVERTIGHTENING THE CYLINDER VALVE MAY CAUSE DAMAGE THAT COULD RESULT IN LEAKAGE OF AIR FROM THE CYLINDER. USE NO TOOLS TO CLOSE THE CYLINDER VALVE.

WARNING

FAILURE TO VERIFY PROPER OPERATION OF THE EQUIPMENT AFTER INSTALLATION OF AN ALTERNATE QUICK DISCONNECT TO THE MANIFOLD COULD LEAD TO A MALFUNCTION OF THE EQUIPMENT DURING USE IN A HAZARDOUS ATMOSPHERE WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

[3] Schrader is a registered trademark of Scovill, Inc.
[4] Hansen is a registered trademark of Tuthill Corporation.

EQUIPMENT MARKINGS

Do not alter or cover over any labels on the SCOTT RIT-PAK III portable air supply or air supply cylinder and valve assembly. If user applied identification markings are added to the SCOTT RIT-PAK III portable air supply or air supply cylinder and valve assembly, do not obscure any labels supplied on the SCOTT RIT-PAK III portable air supply or air supply cylinder and valve assembly. Any user applied markings must be applied in a manner that will not weaken or damage any components of the SCOTT RIT-PAK III portable air supply or the air supply cylinder and valve assembly, will not interfere with the proper function of these assemblies, and will not add flammable materials to these assemblies.

TECHNICAL SPECIFICATIONS

The Pressure Reducer Assembly that is provided with the SCOTT RIT-PAK III portable air supply is equipped with a relief valve. If air is heard or felt coming from the relief valve, DO NOT USE THE ASSEMBLY. Remove the equipment from service and tag for repair by authorized personnel.

A properly functioning Reducer Assembly connected to a fully charged cylinder (appropriate for the operating pressure of the unit) will have output pressure of approximately 70 psig to 100 psig with no flow and a minimum outlet pressure of 55 psig with a flow of approximately 400 liters per minute.

PERIODIC TESTING

SCOTT recommends that the SCOTT RIT-PAK III portable air supply be checked, both visually and functionally, by a SCOTT Authorized Service Center using SCOTT Authorized Test Equipment at least every two years. However, heavy use may require more frequent testing. This recommendation is in addition to all other cleaning and maintenance procedures.

WARNING

APPLYING ANY MARKINGS OR LABELS THAT DAMAGE OR OBSCURE THE EXISTING LABELING MAY INTERFERE WITH PROPER IDENTIFICATION OF ASSEMBLIES. IMPROPER IDENTIFICATION OF ASSEMBLIES MAY RESULT IN ERRORS IN MAINTENANCE OR OPERATION CAUSING FAILURE OF THE EQUIPMENT WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

WARNING

DO NOT APPLY ANY MARKINGS OR LABELS THAT DAMAGE OR INTERFERE WITH THE OPERATION OF THE EQUIPMENT. ANY USER APPLIED MARKINGS THAT INTERFERE WITH THE OPERATION OF THE EQUIPMENT MAY CAUSE A FAILURE OF THE EQUIPMENT AND MAY RESULT IN SERIOUS INJURY OR DEATH.

SCOTT SAFETY

LIMITED WARRANTY ON RIT-PAK III PRODUCTS

Scott Safety (SCOTT) warrants RIT-PAK III PRODUCTS (THE PRODUCTS) to be free from defects in workmanship and materials for a period of one (1) year from the date of original manufacture by SCOTT. This warranty applies to all components of THE PRODUCTS including all accessories and optional equipment purchased and supplied at the time of original sale of THE PRODUCTS, EXCEPT:

- SCOTT warrants all electrically operated devices supplied with THE PRODUCTS to be free from defects in workmanship and materials for three (3) years from the date of original manufacture by SCOTT.
- SCOTT warrants all pressure reducers supplied with THE PRODUCTS to be free from defects in workmanship and materials for a period of five (5) years from the date of original manufacture by SCOTT.

SCOTT's obligation under this warranty is limited to replacing or repairing (at SCOTT's option) THE PRODUCTS or components shown to be defective in either workmanship or materials. Only personnel of SCOTT or, when directed by SCOTT, authorized SCOTT agents are authorized to perform warranty obligations. This warranty does not apply to defects or damage caused by any repairs of or alterations to THE PRODUCTS made by owner or any third party unless expressly permitted by SCOTT product manuals or by written authorization from SCOTT. To obtain performance under this warranty, and as a condition precedent to any duty of SCOTT, the purchaser must return such products to SCOTT, a SCOTT authorized distributor or a SCOTT authorized service center. Any product returned to SCOTT shall be sent to "SCOTT SAFETY" (Attn: Warranty Claim Dept.), P.O. Box 569, Monroe, NC 28111. This warranty does not apply to any malfunction of or damage to THE PRODUCTS resulting from accident, alteration, misuse or abuse. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN ADDITION, SCOTT EXPRESSLY DISCLAIMS ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN ANY WAY CONNECTED WITH THE SALE OR USE OF SCOTT HEALTH & SAFETY PRODUCTS, AND NO OTHER FIRM OR PERSON IS AUTHORIZED TO ASSUME ANY SUCH LIABILITY.

SCOTT SAFETY

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